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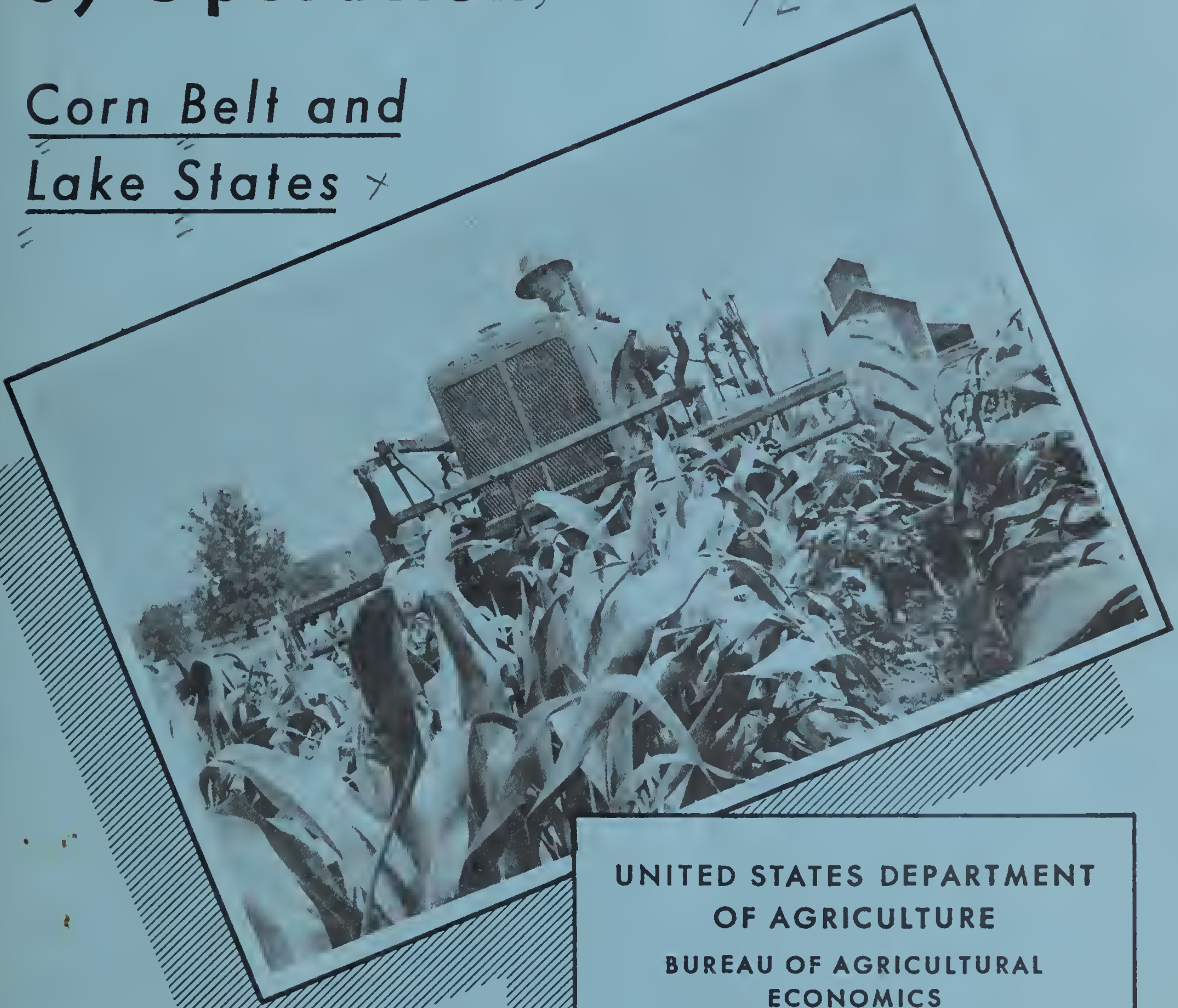
U.S. DEPARTMENT OF AGRICULTUR

CROP PRODUCTION PRACTICES

Labor, Power, and Materials, by Operation

92 55-72

Corn Belt and Lake States



UNITED STATES DEPARTMENT
OF AGRICULTURE
BUREAU OF AGRICULTURAL
ECONOMICS
WASHINGTON, D. C.
June 1952

CROP PRODUCTION PRACTICES;
Labor, Power and Materials, by Operation.

Section 2. CORN BELT AND LAKE STATES

This publication presents information concerning production practices, man labor, power, machinery, and material requirements for several important crops in specified type-of-farming areas in the Corn Belt and Lake States.

The information presented for each crop in each type-of-farming area was obtained from approximately 30 to 90 farmers through personal interviews. Field surveys were made in 1948, 1949, 1950, and 1951. For the most part, information obtained was for the crop last harvested. As a result, data in this publication cover specified crops harvested in 1947 through 1951. Surveys have been made for crops in other areas. Information relating to these crops is to be released as rapidly as it can be summarized.

Additional surveys are already planned. Some of these will cover additional areas and probably some different crops. Also, it is planned to repeat surveys in many of these areas to keep current as to changing practices and methods of production.

Farms included in the survey were selected through accepted random sampling methods from those growing the crops on a commercial basis in the specified area. In some instances, production of a particular crop was confined to a comparatively small area or to a number of small areas. Sometimes a crop was grown by practically all farmers in the type-of-farming area. In each instance, an attempt was made to obtain a cross-section of the commercial producers in the type-of-farming area.

Although the number of farms surveyed for each crop does not appear to be large, in most cases enough farms were surveyed so that reasonably stable averages for the common and important items were obtained. It was practically impossible to obtain statistically reliable estimates for many items on crops for which practices varied widely. This was particularly true when new practices and materials had been recently introduced and had not as yet been adopted by many producers.

For example, in some areas the use of commercial fertilizers has been a standard practice for many years in the production of some crops. However, use of fertilizers in production of other crops in certain areas is still in the experimental stage, and the number of farmers using fertilizers and the kinds and amounts of fertilizer used vary widely.

Use of weed sprays is becoming common in many areas. Several new kinds of insecticides and fungicides are used and the method of applying them and the kind of equipment used vary widely. A good deal of spraying and dusting is done with custom or contract outfits. Much of it is done with wholly or partially farmer-made equipment. Some of the material is applied by airplane, particularly in later stages in the growth of the crop. These recent innovations in materials used and methods of application cause wide variation in materials used and practices followed by farmers.

In each instance, the farmer was asked to enumerate operations in the sequence in which they were performed. Kind and size of machine and tractor used and the number of men and the time required per acre were recorded for each operation. In the case of practices that were repeated, such as cultivating and irrigating, and consistent or significant differences in time requirements between practices were noted, the pertinent detail is listed separately in the summary tables.

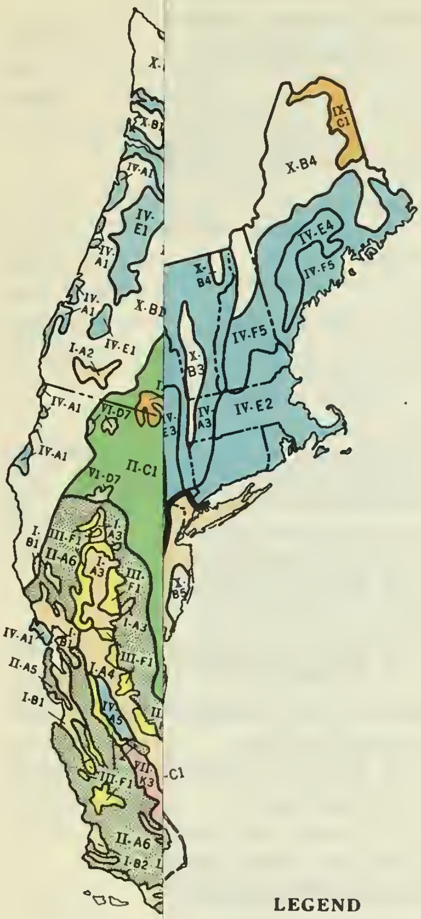
An attempt was made to account for all labor, power, machinery, contract or custom work, and material used in producing and harvesting the crops. In summarizing the data, certain items were combined unless it was apparent that the material or practice was increasing in importance and probably would become largely universal. For example, the use of pick-up balers, commercial fertilizers, and some pesticides appeared to be increasing in importance. These were listed and the percentage of the acreage covered was given so that at a later date changes in practices may be estimated.

Miscellaneous sizes of equipment were not listed in the final summaries but time requirements, acreage covered, and pertinent data for such operations were included with operations of important sizes of the same kind of equipment. For example, for a given crop in a certain area, 65 percent of the plowing was done with 2-14 inch plows, 30 percent with 1-16 inch plows, 3 percent with 1-18 inch plows, and 2 percent with 1-14 inch plows. In this case, acreages plowed with 1-14 and 1-18 inch plows are combined with the acreage plowed with 1-16 inch plows, and the rate of plowing carried in the summary for one-bottom plows is that for 1-16 inch plows.

In some instances it was impossible to obtain performance rates for custom machines from the persons interviewed. For this reason the rate used in the summaries for many custom jobs is the average rate given by farm operators who use the same sized machines and crews. Custom work performed with several sizes of equipment of which only one or two accounted for a sizable portion of the acreage, is listed with the more common size or sizes of equipment.

All work performed, regardless of who performed the service, and all materials used are included in the summary. Unless otherwise specified, a tractor was the source of power. Performance rates are those given for actual field operations under usual conditions. Time required in extensive repairs, break-downs, and general farm overhead is not included. In the final summarization time, requirements for each operation were multiplied by a specified factor to account for direct man-labor spent in lubricating, checking and adjusting machines, making minor repairs, and moving from field to field.

Immediately following this discussion is a map which identifies or locates each type-of-farming area. The identification of type-of-farming areas given on the map corresponds with the identification of the type-of-farming areas listed in the tables that follow, showing crops, areas and the year to which the data apply.



LEGEND

☐ RUIT, TRUCK, AND MIXED FARMING

NGE LIVESTOCK
- ▨ A. SEASONAL GRAZING–MIGRATORY
- ☐ B. SEASONAL GRAZING–NONMIGRATORY
- 🟩 C. UPLAND SUMMER GRAZING
- ▨ D. YEAR-LONG GRAZING

🟨 HEAT AND SMALL GRAINS

🟦 IRY

🟦 ED GRAINS AND LIVESTOCK (CORN BELT)

☐ ENERAL FARMING

🟥 TTON

🟫 BACCO AND GENERAL FARMING

🟧 ECIAL CROPS AND GENERAL FARMING

☐ NFARMING

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U. S. DEPARTMENT OF BUREAU OF AGRICULTURAL ECONOMICS

REGIONALIZATION OF TYPE

V. FEED GRAINS AND LIVESTOCK (

- A. CATTLE FEEDING AND HOGS
  - A 1. Central Missouri River Valley A
- B. CASH CORN, OATS, AND SOYBEANS
  - B 1. Central Iowa. B 2. East Central I
- C. HOGS AND SOFT WINTER WHEAT
  - C 1. Central Indiana—Southwestern Ohio.
  - C 2. Wabash and Lower Ohio River Valley
- D. LIVESTOCK, DAIRY, SOYBEANS, AND CA
  - D 1. Northwestern Ohio—Northeastern Ind
- E. HOGS AND DAIRY
  - E 1. N. E. Iowa—N. W. Illinois—S. W. Wis
- F. LIVESTOCK AND CASH GRAIN
  - F 1. Northwestern Corn—Livestock Trans
  - F 2. Southwestern Corn—Hard Winter Wh
  - F 3. Western Corn Belt Fringe. F 4. N
  - F 5. Northern Iowa—Southwestern Minnes
- G. LIVESTOCK, CASH GRAIN, AND DAIRY
  - G 1. Western Missouri—Eastern Kansas.
- H. LIVESTOCK AND PASTURE
  - H 1. Southern Iowa—Northern Missouri—
  - H 2. Northwestern Indiana—Southwestern

VI. GENERAL FARMING

- A. DAIRY AND LIVESTOCK FEEDING—IRRIG
  - A 1. Western Nevada.
- B. DAIRY, HAY, AND SUGAR BEETS—IRRIGA
  - B 1. Lower Snake River.
- C. DAIRY AND RANGE LIVESTOCK—SMALL
  - C 1. Northern Rocky Mountain Cut-over.
- D. LIVESTOCK AND SPECIAL CROPS—IRRIG
  - D 1. Central Utah and Southeastern Idaho.
  - D 3. San Luis Valley. D 4. Upper Arkan
  - D 6. Southern Yakima Valley. D 7. Othe
- E. LIVESTOCK AND CASH GRAIN
  - E 1. Grand Prairie of Texas.
  - E 2. Southeast Kansas—Northeast Oklaho
  - E 3. Southern High Plains, Texas—New M
- F. LIVESTOCK, TRUCK, AND COTTON—SMA
  - F 1. Southern Ozark and Ouachita Mounta
- G. DAIRY, LIVESTOCK, AND POULTRY
  - G 1. St. Louis Milkshed. G 2. Ozark M
  - G 3. Southern Illinois Gray Lands.
- H. LIVESTOCK AND TOBACCO
  - H 1. Knobs and Coal Fields, Indiana—Kent
  - H 2. Highland Rim of Tennessee. H 3.
  - H 4. Central Virginia Piedmont.
- J. LIVESTOCK AND DAIRY
  - J 1. Central Basin of Tennessee. J 2. C
- K. LIVESTOCK, FRUIT, AND TOBACCO—SMA
  - K 1. Appalachian Mountains.
- L. TRUCK, TOBACCO, AND LIVESTOCK
  - L 1. Tidewater Virginia—North Carolina.
- M. FOREST PRODUCTS, TRUCK, AND COTTO
  - M 1. Atlantic and Gulf Coast Flatwoods.
  - M 2. Texas—Louisiana Cut-over.

VII. COTTON

- A. SPECIALIZED COTTON
  - A 1. Southern High Plains. A 2. Texas
  - A 3. Corpus Christi. A 4. Deltas of Mi
  - A 5. Mississippi and Tennessee Clay Hills
  - A 6. Sand Mountain, Alabama. A 7. Sout
  - A 8. Upper Coastal Plains.
- B. COTTON AND TOBACCO
  - B 1. Central Coastal Plains, North Caroli
- C. COTTON, TOBACCO, HOGS, AND PEANUT
  - C 1. Lower Coastal Plains, Georgia—Flor

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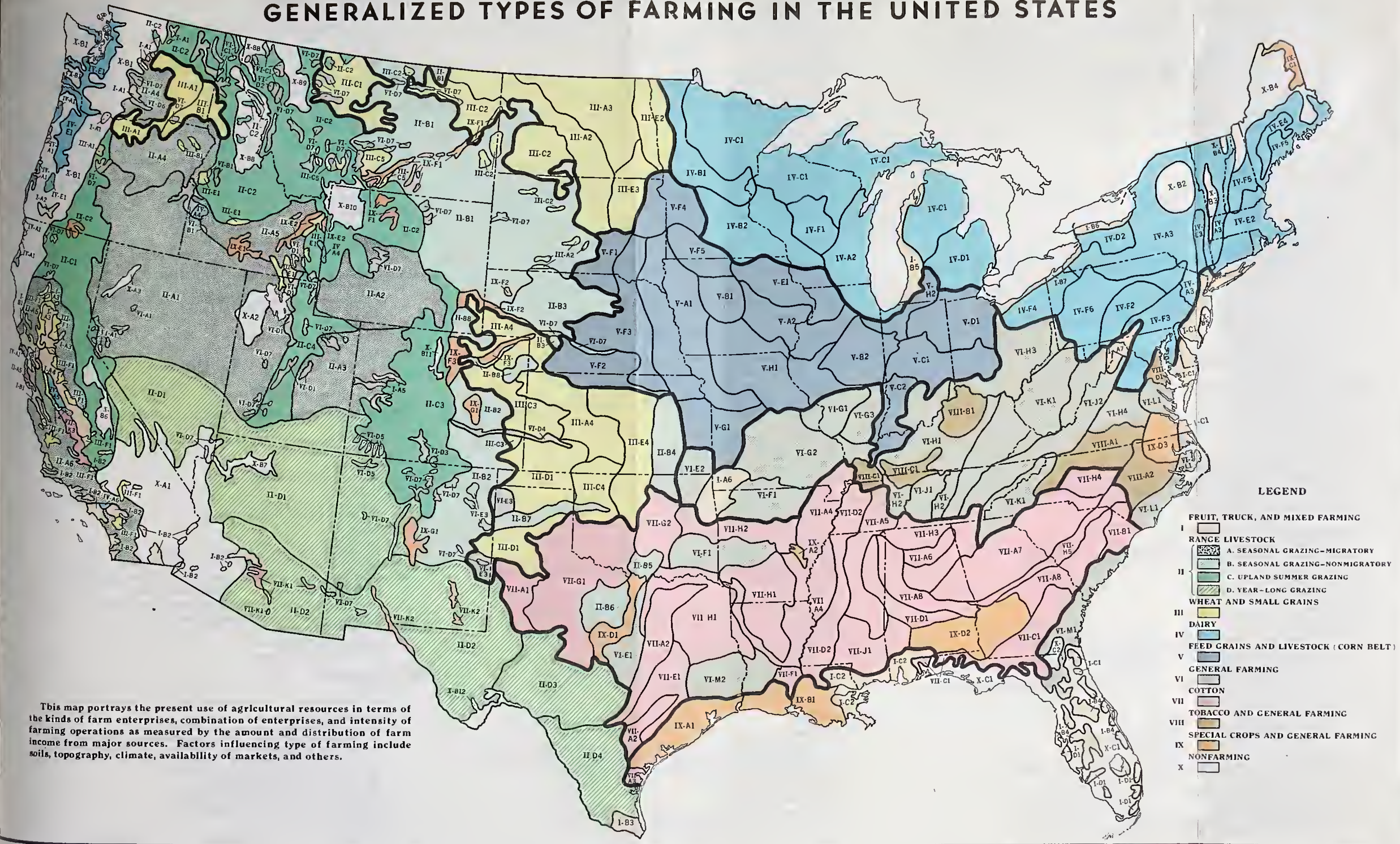
GENERALIZED TYPES OF FARMING IN THE UNITED STATES



This map portrays the present use of agricultural resources in terms of the kinds of farm enterprises, combination of enterprises, and intensity of farming operations as measured by the amount and distribution of farm income from major sources. Factors influencing type of farming include soils, topography, climate, availability of markets, and others.

U.S. DEPARTMENT OF AGRICULTURE

1949

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BUREAU OF AGRICULTURAL ECONOMICS

CLASSIFICATION AND REGIONALIZATION OF TYPES OF FARMING IN THE UNITED STATES

I. FRUIT, TRUCK, AND MIXED FARMING

A. FRUIT AND MIXED FARMING
A 1. Central Washington. A 2. Southern Oregon. A 3. Sacramento Valley.
A 4. San Joaquin Valley. A 5. Colorado West Slope.
A 6. Ozark Plateau, Mo.—Ark.—Okla. A 7. Shenandoah—Cumberland Valleys.

B. FRUIT, TRUCK, AND MIXED FARMING
B 1. Central California Coast. B 2. Southern California and Southwestern Arizona.
B 3. Lower Rio Grande Valley. B 4. Central Florida.
B 5. Eastern Shore of Lake Michigan. B 6. Southern Shore of Lake Ontario.
B 7. Southern Shore of Lake Erie.

C. TRUCK AND MIXED FARMING
C 1. Atlantic Sandy Coastal Plain. C 2. Gulf Coast.

D. TRUCK
D 1. Southern Florida.

II. RANGE LIVESTOCK

A. SEASONAL GRAZING—MIGRATORY
A 1. Great Basin. A 2. Wyoming Basin. A 3. Colorado Plateau.
A 4. Columbia Basin—Blue Mountains. A 5. Snake River.
A 6. Sierra Foothills—Coast Range.

B. SEASONAL GRAZING—NONMIGRATORY
B 1. Northern Great Plains. B 2. Southern High Plains.
B 3. Nebraska Sandhills Stock Farms. B 4. Osage—Flint Hills Stock Farms.
B 5. Arbuckle Mountain, Oklahoma Stock Farms. B 6. North Texas Grazing Area.
B 7. Canadian River Breaks. B 8. Central Plains Stock Farms.

C. UPLAND SUMMER GRAZING
C 1. Sierra and Southern Cascade Mountains.
C 2. Northern Rocky Mountains and Associated Ranges.
C 3. Southern Rocky Mountains. C 4. Middle Rocky Mountains.

D. YEAR-LONG GRAZING
D 1. Southwestern Semidesert, Migratory.
D 2. Southwestern Semidesert, Nonmigratory.
D 3. Edwards Plateau. D 4. Rio Grande Plains, Texas.

III. WHEAT AND SMALL GRAINS

A. SPECIALIZED WHEAT
A 1. Columbia River Basin, Western Portion. A 2. East of Missouri River.
A 3. Central North Dakota. A 4. Central Plains.

B. WHEAT AND PEAS
B 1. Columbia River Basin, Eastern Portion.

C. WHEAT AND RANGE LIVESTOCK
C 1. Triangle—Judith Basin, Montana. C 2. Northern Plains.
C 3. Central High Plains. C 4. Red Hills. C 5. Southern Montana.

D. WHEAT, GRAIN SORGHUMS, AND RANGE LIVESTOCK
D 1. Southern High Plains.

E. WHEAT AND GENERAL FARMING
E 1. Southern Idaho. E 2. Red River Valley.
E 3. South Dakota—North Dakota, Spring Wheat—Corn Transition.
E 4. Central Kansas—Oklahoma.

F. SMALL GRAINS
F 1. California Valley Borders.

IV. DAIRY

A. SPECIALIZED DAIRY
A 1. North Pacific Coast. A 2. Eastern Wisconsin—Northeastern Illinois.
A 3. Central Northeast. A 4. Boise Valley and Star Valley.
A 5. San Joaquin Valley A 6. Los Angeles Milkshed.

B. DAIRY AND LIVESTOCK
B 1. Minnesota Cut-over Fringe. B 2. Southeast Minnesota—West Central Wisconsin.

C. DAIRY, HAY, AND POTATOES
C 1. Lake States Cut-over, Small Scale.

D. DAIRY AND CASH CROPS
D 1. East Central Michigan. D 2. Western New York.

E. DAIRY, POULTRY, AND MIXED FARMING
E 1. Puget Sound—Willamette Valley. E 2. Southern New England.
E 3. Hudson River Valley. E 4. Central Maine.

F. DAIRY AND GENERAL FARMING
F 1. Central Wisconsin. F 2. Central Pennsylvania.
F 3. Northern Piedmont. F 4. Lake Erie Border.
F 5. Northern New England, Small Scale.
F 6. Allegheny Plateau, Pennsylvania, Small Scale.

V. FEED GRAINS AND LIVESTOCK (CORN BELT)

A. CATTLE FEEDING AND HOGS
A 1. Central Missouri River Valley A 2. Eastern Iowa—Western Illinois.

B. CASH CORN, OATS, AND SOYBEANS
B 1. Central Iowa. B 2. East Central Illinois.

C. HOGS AND SOFT WINTER WHEAT
C 1. Central Indiana—Southwestern Ohio.
C 2. Wabash and Lower Ohio River Valleys.

D. LIVESTOCK, DAIRY, SOYBEANS, AND CASH GRAIN
D 1. Northwestern Ohio—Northeastern Indiana.

E. HOGS AND DAIRY
E 1. N. E. Iowa—N. W. Illinois—S. W. Wisconsin.

F. LIVESTOCK AND CASH GRAIN
F 1. Northwestern Corn—Livestock Transition.
F 2. Southwestern Corn—Hard Winter Wheat Transition.
F 3. Western Corn Belt Fringe. F 4. Northwestern Corn Belt Fringe.
F 5. Northern Iowa—Southwestern Minnesota.

G. LIVESTOCK, CASH GRAIN, AND DAIRY
G 1. Western Missouri—Eastern Kansas.

H. LIVESTOCK AND PASTURE
H 1. Southern Iowa—Northern Missouri—West Central Illinois.
H 2. Northwestern Indiana—Southwestern Michigan.

VI. GENERAL FARMING

A. DAIRY AND LIVESTOCK FEEDING—IRRIGATED
A 1. Western Nevada.

B. DAIRY, HAY, AND SUGAR BEETS—IRRIGATED
B 1. Lower Snake River.

C. DAIRY AND RANGE LIVESTOCK—SMALL SCALE
C 1. Northern Rocky Mountain Cut-over.

D. LIVESTOCK AND SPECIAL CROPS—IRRIGATED
D 1. Central Utah and Southeastern Idaho. D 2. Western Montana.
D 3. San Luis Valley. D 4. Upper Arkansas Valley. D 5. San Juan Basin.
D 6. Southern Yakima Valley. D 7. Other Irrigated Valleys.

E. LIVESTOCK AND CASH GRAIN
E 1. Grand Prairie of Texas.
E 2. Southeast Kansas—Northeast Oklahoma.
E 3. Southern High Plains, Texas—New Mexico.

F. LIVESTOCK, TRUCK, AND COTTON—SMALL SCALE
F 1. Southern Ozark and Ouachita Mountains.

G. DAIRY, LIVESTOCK, AND POULTRY
G 1. St. Louis Milkshed. G 2. Ozark Mountains and Border.
G 3. Southern Illinois Gray Lands.

H. LIVESTOCK AND TOBACCO
H 1. Knobs and Coal Fields, Indiana—Kentucky.
H 2. Highland Rim of Tennessee. H 3. Upper Ohio River Valley and Hills.
H 4. Central Virginia Piedmont.

J. LIVESTOCK AND DAIRY
J 1. Central Basin of Tennessee. J 2. Great Appalachian Valley.

K. LIVESTOCK, FRUIT, AND TOBACCO—SMALL SCALE
K 1. Appalachian Mountains.

L. TRUCK, TOBACCO, AND LIVESTOCK
L 1. Tidewater Virginia—North Carolina.

M. FOREST PRODUCTS, TRUCK, AND COTTON—SMALL SCALE
M 1. Atlantic and Gulf Coast Flatwoods.
M 2. Texas—Louisiana Cut-over.

VII. COTTON

A. SPECIALIZED COTTON
A 1. Southern High Plains. A 2. Texas Black Waxy Prairies.
A 3. Corpus Christi. A 4. Deltas of Mississippi River and Tributaries.
A 5. Mississippi and Tennessee Clay Hills and Sandy Loams.
A 6. Sand Mountain, Alabama. A 7. Southern Piedmont.
A 8. Upper Coastal Plains.

B. COTTON AND TOBACCO
B 1. Central Coastal Plains, North Carolina—South Carolina.

C. COTTON, TOBACCO, HOGS, AND PEANUTS
C 1. Lower Coastal Plains, Georgia—Florida.

VII. COTTON (CONTINUED)

D. COTTON AND LIVESTOCK
D 1. Alabama—Mississippi Black Belt.
D 2. Mississippi—Tennessee—Louisiana Silt Loams.

E. COTTON AND RANGE LIVESTOCK
E 1. Post Oak Strip of Texas.

F. COTTON AND SUGARCANE
F 1. Central Louisiana.

G. COTTON AND WHEAT
G 1. Rolling Plains, Texas—Oklahoma.
G 2. Mixed Prairies and Cross Timbers of Oklahoma.

H. COTTON AND GENERAL FARMING
H 1. Western Sandy Coastal Plains, Texas—Arkansas—Louisiana—Oklahoma.
H 2. Arkansas River Valleys and Uplands.
H 3. Limestone Valleys and Uplands, Tennessee—Georgia—Alabama.
H 4. Piedmont of Central North Carolina.
H 5. Sand Hills of the Carolinas and Georgia.

J. COTTON AND FOREST PRODUCTS
J 1. Gulf Coast Piney Woods.

K. IRRIGATED COTTON AND ALFALFA
K 1. Southern Arizona. K 2. Rio Grande—Pecos. K 3. San Joaquin Valley.

VIII. TOBACCO AND GENERAL FARMING

A. FLUE-CURED
A 1. Piedmont, Virginia—North Carolina.
A 2. Central Coastal Plains, North Carolina.

B. BURLEY
B 1. Central Kentucky Bluegrass.

C. DARK
C 1. Pennyroyal—Purchase, Kentucky—Tennessee.

D. SOUTHERN MARYLAND
D 1. Southern Maryland.

IX. SPECIAL CROPS AND GENERAL FARMING

A. RICE
A 1. Gulf Coastal Prairies, Texas—Louisiana.
A 2. Arkansas Prairies.

B. SUGARCANE
B 1. Lower Louisiana Delta.

C. POTATOES
C 1. Aroostook County, Maine.
C 2. Klamath Basin, Oregon—California.

D. PEANUTS
D 1. Cross Timbers, Texas.
D 2. Southern Coastal Plains, Georgia—Alabama.
D 3. Northern Coastal Plains, Virginia—North Carolina.

E. POTATOES, DRY BEANS, SUGAR BEETS, AND LIVESTOCK—IRRIGATED
E 1. Middle Snake River. E 2. Upper Snake River.

F. SUGAR BEETS, DRY BEANS, AND LIVESTOCK—IRRIGATED
F 1. Upper Yellowstone River and Wyoming.
F 2. North Platte River. F 3. Northeastern Colorado.

G. DRY BEANS—NONIRRIGATED
G 1. Colorado—New Mexico.

X. NONFARMING

A. DESERTS
A 1. Mohave Desert. A 2. Utah Salt Flats. A 3. Black Rock Desert.

B. MOUNTAINS AND FORESTS
B 1. Cascade Mountains and Associated Ranges.
B 2. Adirondack Mountains. B 3. Green Mountains of Vermont.
B 4. Northern Maine and New Hampshire Woods. B 5. New Jersey Pines.
B 6. Yosemite, General Grant, and Sequoia National Parks and Vicinity.
B 7. Grand Canyon National Park and Vicinity.
B 8. Northwestern Rocky Mountain Area.
B 9. Glacier National Park and Vicinity.
B10. Yellowstone National Park and Vicinity.
B11. Rocky Mountain National Park and Vicinity.
B12. Big Bend National Park and Vicinity.

C. LOWLANDS AND EVERGLADES
C 1. Florida Everglades and Flatwoods. C 2. Okefenokee Swamp.

Following the map is a listing of the crops for which data were obtained in the Corn Belt and Lake States, the year to which the data pertain, and the type-of-farming area or portion of the area in which the survey was made. Data obtained for the crop produced in part of the type-of-farming area are so specified.

Information similar to that presented in this publication is given in other publications for (1) the Northeast, (2) the Appalachian, Southeast and Mississippi Delta, (3) the northern and southern Plains, and (4) the Mountain and Pacific States. A list of States included in each type-of-farming region, together with the information available for each region, appears at the end of this publication.

Requests for this information have come from many sources. One of the primary uses of the data has been to enable the Bureau of Agricultural Economics to provide the Federal Crop Insurance Corporation with estimates of farmers' investments in insured crops by stages in the growth of the crop. These estimates are revised each year as practices and cost rates change.

Extensive use is made of the data in many research projects, particularly in the research work relating to costs and returns in the Bureau of Agricultural Economics. Wide use of the data also is made by staffs in the Land-Grant Colleges, by other agencies in the Federal Government, and by private organizations and individuals. Staffs in the Land-Grant Colleges in many States contributed data, made helpful suggestions, and assisted in many other ways.

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 2

Lake States and Corn Belt

Crop	Type-of-farming area	Crop year	Page
Alfalfa:	I-B5	1950	6
	IV-D1	1949	8
	IV-F1	1950	10
	IV-F4	1949	12
	VI-H3 (Ohio)	1949	14
Barley:	III-E2	1950	16
	IV-A2	1950	18
	IV-B2	1950	20
	IV-D1	1949	22
	IV-F1	1950	24
	V-A1	1949	26
	V-F4	1949	28
Beans, dry:	IV-D1	1949	30
Clover, hay:	I-B5	1950	32
	IV-D1	1949	34
	IV-F1	1950	36
	IV-F4	1949	38
	VI-H3 (Ohio)	1949	40
Corn, grain:	I-B5	1950	42
	IV-A2	1950	44
	IV-B1	1950	46
	IV-B2	1950	48
	IV-D1	1949	50
	IV-F1	1950	52
	IV-F4	1949	54
	V-A1	1949	56
	V-A1 (Nebr.)	1948	58
	V-B1	1947	60
	V-B2 (Ill.)	1947	62
	V-D1	1949	64
	V-F4	1949	66
	V-G1	1949	68
	V-H1	1950	70
	V-H2	1950	72
	VI-G2	1950	74
	VI-G3	1950	76
	VI-H3 (Ohio)	1949	78
Corn, silage:	I-B5	1950	80
	IV-A2	1950	82
	IV-B2	1950	84
	IV-D1	1949	86
	IV-F1	1950	88
	IV-F4	1949	90
	V-D1	1949	92
	V-F4	1949	94
	V-H2	1950	96
	VI-H3 (Ohio)	1949	98
Corn, sweet: (fresh market)	IV-A2	1950	100
Corn, sweet: (processing)	IV-A2	1950	102
	IV-B2	1950	104
Flax:	IV-A2	1950	106
	IV-B1	1950	108
	IV-B2	1950	110
	V-A1	1949	112
	V-F4	1949	114
Grain sorghum:	V-A1	1949	116
	V-G1	1949	118
Oats:	I-B5	1950	120
	III-E2	1950	122
	IV-A2	1950	124
	IV-B1	1950	126
	IV-B2	1950	128
	IV-D1	1949	130
	IV-F1	1950	132
	IV-F4	1949	134
	V-A1	1949	136
	V-B1	1947	138
	V-B2 (Ill.)	1947	140
	V-D1	1949	142
	V-F4	1949	144
	V-G1	1949	146
	V-H1	1950	148
	V-H2	1950	150
	VI-G2	1950	152
	VI-G3	1950	154

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 2 - Continued

Lake States and Corn Belt

Crop	Type-of-farming area	Crop year	Page	Crop	Type-of-farming area	Crop year	Page
Peas: (processing)	IV-A2	1950	156	Wheat, spring:	IV-A2	1950	192
	IV-F1	1950	158		IV-B1	1950	194
					IV-B2	1950	196
Red clover seed:	I-B5	1950	160		V-F4	1949	198
Rye:	III-E2	1950	162				
	IV-B1	1950	164	Wheat, winter:	I-A6 (Mo.)	1950	200
Soybeans:	IV-B1	1950	166		I-B5	1950	202
	IV-B2	1950	168		IV-B1	1950	204
	IV-D1	1949	170		IV-B2	1950	206
	V-A1	1949	172		IV-D1	1949	208
	V-B1	1947	174		IV-F4	1949	210
	V-B2 (Ill.)	1947	176		V-A1 (Nebr.)	1949	212
	V-D1	1949	178		V-D1	1949	214
	V-F4	1949	180		V-G1	1949	216
	V-G1	1949	182		V-H1	1950	218
	V-H1	1950	184		V-H2	1950	220
	VI-G2	1950	186		VI-G2	1950	222
	VI-G3	1950	188		VI-G3	1950	224
	VI-H3 (Ohio)	1949	190		VI-H3 (Ohio)	1949	226

ALFALFA HAY: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 24 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck, and mixed farming area on the eastern shore of Lake Michigan. Approximately 100 percent of the alfalfa in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted three years. As a result, one-half of the man labor, power, and machinery used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-third of this is charged annually to the hay crop. All additional materials, man labor, power, and machinery used directly in establishing the hay crop are prorated also to the annual charges for the hay crop according to the estimated life of the seeding.

The farms surveyed averaged 214 total acres. In 1950, 136 acres were in crops, including 33 acres of alfalfa cut for hay. The average yield of alfalfa hay was approximately 2.6 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Alfalfa seed	Lb.	8	0.65	5.20	100	5.20
Mixed fertilizer	Cwt.	2.51	2.25	5.65	75	1/ 2.12
Lime	Ton	2.1	3.00	6.30	13	.82
Marl	Yd.	2.5	1.25	3.12	6	.19
Total for establishment						8.33
Annual charge to alfalfa	---	---	---	---	---	2.78
Manure	Ton	8	2/ 2.00	16.00	38	6.08
Baler twine	Lb.	3.0	.25	.75	21	.16
Total materials used						9.02

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	86	.10	8.60	11	.95
Total contract work						.95

1/ Allocated one-half the cost to the nurse crop.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa hay, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding:								
Total alfalfa 1/	---	---	---	---	---	1.64	1.49	0.03
Annual 2/	---	---	---	---	---	.55	.50	.01
Apply manure, spreader	90-bu.	1.0	3.06	1.22	35	1.07	.43	---
Apply manure, spreader, h.	90-bu.	1.0	2.90	3.17	3	.09	---	.10
Harrow, springtooth	9-foot	1.0	.35	.34	81	.28	.28	---
Total preharvest						1.99	1.21	.11
Mow	7-foot	2.0	.50	.44	96	.96	.84	---
Mow, horses	5-foot	2.0	1.07	1.96	4	.09	---	.16
Rake, side-delivery	9-foot	2.0	.46	.42	96	.88	.81	---
Rake, side-delivery, h.	9-foot	2.0	.46	.88	4	.04	---	.07
Haul loose hay	---	2.0	1.78	.38	79	2.81	.60	---
Bale, pick-up	---	2.0	1.11	.98	10	.22	.20	---
Bale, contract	---	2.0	1.01	.68	11	.22	.15	---
Haul baled hay	---	2.0	1.61	.28	21	.68	.12	---
Total harvest						5.90	2.72	.23
Total						7.89	3.93	.34

1/ In this area approximately 100 percent of the farms seeded hay crops with a nurse crop. As a result, the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of alfalfa hay seeding in this area is approximately three years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to average life of seeding.

ALFALFA, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 38 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy-and cash-crop area. Approximately 100 percent of the alfalfa in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted 3 years. As a result one-half of the man labor, power, and machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-third of this is charged annually to the hay crop. All additional materials such as alfalfa, clover, and grass seeds and man labor, power and machinery used directly in establishing the hay crop are prorated also to the annual charges for the hay crop according to the estimated life of the seeding.

The farms surveyed averaged 156 total acres. In 1949, 121 acres were in crops, including 20 acres of alfalfa cut for hay. The average yield of alfalfa hay was approximately 2.1 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Alfalfa seed	Lb.	11	.60	6.60	100	6.60
Clover seed	Lb.	5	.55	2.75	14	.38
Timothy seed	Lb.	1	.10	.10	25	.02
Inoculant	Lb.	11	.01	.11	70	.08
Manure	Ton	8	1/2.00	16.00	21	2/1.68
Mixed fertilizer	Cwt.	2.10	1.90	3.99	23	2/ .46
Limestone	Ton	1.0	3.35	3.35	11	.37
Total for establishment						9.59
Annual charge to alfalfa	---	---	---	---	---	3.20
Baler twine	Lb.	1/6.5	1/.25	1.62	58	.94
Total annual charge						4.14

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	76	.11	8.36	17	1.42
Total contract						1.42

1/ Estimated.

2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa, mixed hay, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Establish seeding:							
Total alfalfa 1/	---	---	---	---	---	2.44	1.73
Annual 2/	---	---	---	---	---	.81	.58
Total preharvest						.81	.58
Mow	6-foot	1.2	0.66	0.58	100	.79	.70
Rake, side-delivery	---	1.2	.58	.52	100	.70	.62
Haul loose hay	---	1.2	4.24	.80	42	2.14	.40
Bale, pick-up	---	1.2	1.05	.92	18	.23	.20
Bale, pick-up	---	1.2	1.89	.55	23	.52	.15
Bale, contract	---	1.2	1.05	.92	17	.21	.19
Haul baled hay	---	1.2	3.22	.81	58	2.24	.56
Total harvest						6.83	2.82
Total						7.64	3.40

1/ In this area approximately 100 percent of the farms seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of alfalfa, mixed hay seedings in this area is approximately 3 years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of seeding.

ALFALFA, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey in 1951 of approximately 31 farms in central Wisconsin. These farms are in type-of-farming area IV-F1, a dairy, livestock and potato area. Approximately 100 percent of the alfalfa in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted four years. As a result, one-half of the man labor, power, machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the nurse crop, and one-fourth of this is charged annually to the hay crop. All additional materials such as alfalfa, clover, and grass seeds and man labor, power, and machinery used directly in establishing the hay crop are prorated also to the annual charges for the hay crop according to the estimated life of the seeding.

The farms surveyed averaged 126 total acres. In 1950, 94 acres were in crops, including 21 acres of alfalfa cut for hay. The average yield of alfalfa hay was approximately 2.9 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 26; the most common was about 18.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Alfalfa seed	Lb.	11	0.75	8.25	100	8.25
Timothy seed	Lb.	2	.30	.60	32	.19
Red clover seed	Lb.	3	.45	1.35	20	.27
Brome grass seed	Lb.	4	.30	1.20	19	.23
Alsike clover seed	Lb.	2	.40	.80	7	.06
Ladino clover seed	Lb.	1	2.55	2.55	3	.08
Mixed fertilizer	Cwt.	1.95	2.50	4.88	77	2/ 1.88
Phosphate fertilizer	Cwt.	1.75	2.10	3.68	3	2/ .06
Lime	Ton	1.7	1.95	3.32	7	.23
Total for establishment						11.25
Annual charge to alfalfa	---	---	---	---	---	2.81
Manure	Ton	14	3/ 2.00	28.00	43	12.04
Baler twine	Lb.	3	.25	.75	8	.06
Total materials used						14.91

1/ Contract work reported on the farms surveyed in this area was insignificant.

2/ Allocated one-half of the cost to the nurse crop.

3/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa, mixed hay, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding:								
Total alfalfa 1/	---	---	---	---	---	2.04	1.83	0.19
Annual 2/	---	---	---	---	---	.51	.46	.05
Apply manure, spreader	75 bu.	1.0	6.02	1.92	43	2.59	.83	---
Harrow, springtooth	12-foot	1.0	.38	.37	83	.32	.31	---
Total preharvest						3.42	1.60	.05
Mow, first cutting	7-foot	1.0	.65	.55	80	.52	.44	---
Mow, first cutting, h.	5-foot	1.0	1.12	2.05	20	.22	---	.41
Mow, second cutting	7-foot	1.0	.54	.43	56	.30	.24	---
Mow, second cutting, h.	5-foot	1.0	.83	1.52	7	.06	---	.11
Rake, first cutting	9-foot	1.0	.52	.47	85	.44	.40	---
Rake, first cutting, h.	10-foot	1.0	.71	1.36	15	.11	---	.20
Rake, second cutting	9-foot	1.0	.47	.43	59	.28	.25	---
Rake, second cutting, h.	10-foot	1.0	.62	1.19	4	.02	---	.05
Haul loose hay	---	1.6	4.58	1.19	66	4.84	1.25	---
Field chop	---	1.6	1.25	.96	26	.52	.40	---
Haul & blow into silo	---	1.6	1.94	.81	26	.81	.34	---
Bale	---	1.6	1.18	.69	8	.15	.09	---
Haul baled hay	---	1.6	2.72	.53	8	.35	.07	---
Total harvest						8.62	3.48	.77
Total						12.04	5.08	.82

1/ In this area approximately 100 percent of the farms seeded hay crops with a nurse crop. As a result, the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of alfalfa mixed hay seedings in this area is approximately four years. Consequently one-fourth of the labor, power, and machinery charged to establishing the seeding is charged annually to the hay crop.

ALFALFA HAY: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 38 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy-and general-farming area on the Lake Erie border. Approximately 100 percent of the alfalfa in this area is planted without a nurse crop. Farmers in the area reported that hay seedings lasted about 3 years. Consequently the annual charges are based upon a 3-year stand. Most farmers in the area seed alfalfa in combination with timothy, clover and grass seeds. Only 25 percent seeded alfalfa alone.

The farms surveyed averaged 190 total acres. In 1949, 135 acres were in crops, including 15 acres of alfalfa cut for hay. The average yield of hay was 3.4 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Alfalfa seed	Lb.	11	0.61	6.71	100	6.71
Timothy seed	do.	2	.31	.62	49	.30
Red clover seed	do.	4	.59	2.36	39	.92
Ladino clover seed	do.	1	2.20	2.20	21	.46
Brome seed	do.	12	.36	4.32	13	.56
Alsike clover seed	do.	3	.33	.99	6	.06
Manure	Ton	9	[1]2.00	18.00	45	8.10
Mixed fertilizer	Cwt.	2.50	2.05	5.12	96	4.92
Lime	Ton	2.6	3.85	10.01	70	7.01
Total for establishment						29.04
Annual charge to alfalfa	---	---	---	---	---	9.68
Manure	Ton	9	[1]2.00	18.00	6	1.08
Baler twine	Lb.	8.7	.32	2.78	65	1.81
Total materials used						12.57

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	101	.09	9.09	10	.91
Total contract work						.91

[1] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa hay, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding, total	---	---	---	---	---	7.54	4.33	1.12
Establish seeding, annual	---	---	---	---	1/	2.51	1.44	.37
Apply manure, spreader	---	1.0	6.28	2.38	6	.38	.14	---
Total preharvest						2.89	1.58	.37
Mow	7-foot	2.1	.62	.55	91	1.18	1.06	---
Mow, horses	6-foot	2.1	1.33	2.44	9	.25	---	.46
Rake, side-delivery	---	2.1	.51	.46	92	.98	.89	---
Rake, side-delivery, h.	---	2.1	.90	1.72	8	.15	---	.29
Haul loose hay	---	2.1	6.70	.94	25	3.52	.49	---
Bale, pick-up	---	2.1	.80	.59	55	.92	.68	---
Bale, pick-up, contract	---	2.1	.48	.42	10	.10	.09	---
Haul bales	---	2.1	2.31	.35	65	3.15	.48	---
Field chop	---	2.1	1.64	1.39	10	.34	.29	---
Haul and blow into silo	---	2.1	4.83	.84	10	1.01	.18	---
Total harvest						11.60	4.16	.75
Total						14.49	5.74	1.12

1/ In this area approximately 100 percent of the farms seeded hay without a nurse crop, and the average life of the crop was 3 years.

ALFALFA, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey made of approximately 39 farms in 1950, in southeastern Ohio. These farms are in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley. Approximately 100 percent of the alfalfa in this area is planted with a nurse crop. Farmers in the area reported that hay seedings lasted about 3 years. As a result one-half of the man labor, power, machinery, and material used jointly in establishing the hay seeding and the nurse crop is charged to the hay crops, and one-third of this amount is charged annually to the hay crop. All additional materials such as alfalfa, clover, and grass seeds and man labor, power, and machinery used directly in establishing the hay crop are prorated to the annual charges for the hay crop according to the estimated life of the seeding.

Most farmers in the area seed alfalfa in combination with timothy or clover. Only 15 percent seeded alfalfa alone.

The farms surveyed averaged 192 total acres. In 1949, 92 acres were in crops, including 10 acres of alfalfa cut for hay. The average yield of alfalfa, mixed hay was approximately 3.3 tons an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 26; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Alfalfa seed	Lb.	11	0.65	7.15	100	7.15
Timothy seed	Lb.	5	.25	1.25	82	1.02
Red clover seed	Lb.	4	.60	2.40	33	.79
Ladino clover seed	Lb.	1	2.20	2.20	23	.51
Brome grass seed	Lb.	6	.30	1.80	12	.22
Alsike clover seed	Lb.	2	.45	.90	11	.10
Sweet clover seed	Lb.	1	.25	.25	8	.02
Manure	Ton	8	[1] 2.00	16.00	64	[2] 5.12
Mixed fertilizer	Cwt.	3.60	2.20	7.92	94	[2] 3.72
Limestone	Ton	2.3	3.80	8.74	88	7.69
Total for establishment						26.34
Annual charge to alfalfa	---	---	---	---	---	8.78
Manure	Ton	8	[1] 2.00	16.00	5	.80
Baler twine	Lb.	7.6	.30	2.28	31	.71
Total annual charge						10.29

CONTRACT WORK HIRED

Baling	Bale	156	.10	15.60	13	2.03
Field chopping	Acre	1.0	1.35	1.35	5	.07
Total contract work						2.10

[1] Estimated. [2] Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa, mixed hay, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding:								
Total alfalfa 1/	---	---	---	---	---	4.61	1.87	2.56
Annual 2/	---	---	---	---	---	1.54	.62	.85
Apply manure, spreader	75-bu.	1.0	4.93	1.73	5	.25	.09	---
Total preharvest						1.79	.71	.85
Mow	7-foot	2.2	.66	.58	70	1.02	.90	---
Mow, horses	5-foot	2.2	1.21	2.22	30	.80	---	1.46
Rake, side-delivery	---	2.2	.58	.52	76	.97	.87	---
Rake, side-delivery, h.	---	2.2	.74	1.41	24	.39	---	.74
Haul loose hay	---	2.2	5.33	.90	38	4.46	.75	---
Haul loose hay, horses	---	2.2	6.73	4.50	20	2.96	---	1.98
Bale, pick-up	---	2.2	.84	.52	18	.33	.21	---
Bale, pick-up, contract	---	2.2	.58	.50	13	.17	.14	---
Haul baled hay	---	2.2	2.20	.37	31	1.50	.25	---
Field chop	---	2.2	.87	.74	6	.11	.10	---
Field chop, contract	---	2.2	1.05	.89	5	.12	.10	---
Haul and blow into silo	---	2.2	1.24	.65	11	.30	.16	--
Total harvest						13.13	3.48	4.18
Total						14.92	4.19	5.03

1/ Approximately 100 percent of the farms in this area seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of alfalfa mixed hay seedings in this area is approximately 3 years. The labor, power, and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of the seeding.

BARLEY: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern North Dakota and western Minnesota. These farms are in type-of-farming area III-E2, a spring wheat, small grain, livestock, potato and sugar beet area in the Red River Valley.

The farms surveyed averaged 422 total acres. In 1950, 340 acres were in crops, including 72 in barley. The average yield of barley was approximately 33 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 32; the most common was about 21.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.8	1.35	2.43	68	1.65
Purchased seed	do.	1.8	1.95	3.51	32	1.12
Mixed fertilizer	Cwt.	.75	3.40	2.55	12	.31
Phosphate fertilizer	do.	.80	3.45	2.76	11	.30
Spray	Pt.	1.0	1.00	1.00	13	.13
Twine	Lb.	3.5	.25	.88	4	.04
Total materials						3.55

CONTRACT WORK HIRED

Spraying	Acre	1.0	.90	.90	13	.12
Total contract work						.12

Man labor, power, and machinery used by operation in producing and harvesting barley, area III-E2, eastern North Dakota and western Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	3-14 in.	1.0	0.70	0.61	97	0.68	0.59
Disk, tandem	10-foot	1.4	.28	.26	37	.14	.13
Harrow, spiketooth	25-foot	1.5	.10	.09	86	.13	.11
Field cultivate	11-foot	2.0	.24	.23	91	.44	.42
Disk harrow	10-foot	1.0	.74	.70	2	.01	.01
Seed, drill	11-foot	1.0	.26	.24	100	.26	.24
Harrow, spiketooth	25-foot	1.1	.10	.09	84	.09	.08
Spray, plane, contract	---	1.0	.04	---	13	.01	---
Total preharvest						1.76	1.58
Swath	12-foot	1.0	.21	.20	95	.20	.19
Combine	10-foot	1.0	.55	.51	75	.41	.38
Combine, self-propelled	12-foot	1.0	.37	.34	21	.08	---
Haul from combine	---	1.0	.47	.32	96	.45	.31
Bind	8-foot	1.0	.82	.75	4	.03	.03
Shock	---	1.0	.80	---	4	.03	---
Haul bundles	---	1.0	1.10	.19	4	.04	.01
Thresh	---	1.0	.39	.34	4	.02	.01
Haul grain	---	1.0	.34	.23	4	.01	.01
Total harvest						1.27	.94
Total 1/						3.03	2.52

1/ In addition self-propelled combine was used on average of 0.07 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 135 total acres. In 1950, 113 acres were in crops, including 14 in barley. The average yield of barley was approximately 47 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 31; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	2.2	1.35	2.97	49	1.46
Purchased seed	Bu.	2.2	2.65	5.83	51	2.97
Manure	Ton	15	1/ 2.00	30.00	37	11.10
Mixed fertilizer	Cwt.	1.95	2.50	4.88	66	3.22
Lime	Ton	11.7	1.95	22.82	5	1.14
Twine	Lb.	4.0	.26	1.04	53	.55
Total materials						20.44

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	47	.06	2.82	16	.45
Combining	Acre	1.0	6.00	6.00	3	.18
Total contract work						.63

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	4.88	1.85	37	1.81	0.68
Fertilize, spreader	9-foot	1.0	.41	.40	13	.05	.05
Plow, moldboard	2-14 inch	1.0	1.17	1.11	98	1.15	1.09
Disk, tandem	8-foot	2.3	.47	.45	10	.11	.10
Field cultivate	9-foot	1.9	.47	.45	30	.27	.26
Harrow, springtooth	12-foot	2.1	.30	.28	66	.42	.39
Harrow, spiketooth	15-foot	1.3	.18	.17	52	.12	.11
Disk and harrow	8-foot	2.0	.66	.63	2	.03	.03
Cultivate and harrow	8-foot	1.3	.41	.39	7	.04	.04
Cultipack	9-foot	1.0	.37	.36	43	.16	.15
Seed, drill	8-foot	1.0	.54	.49	100	.54	.49
Total preharvest						4.70	3.39
Combine	5-foot	1.0	1.39	1.28	44	.61	.56
Combine, contract	6-foot	1.0	1.39	1.28	3	.04	.04
Haul from combine	---	1.0	1.10	.75	14	.15	.11
Haul from combine, trucks	---	1.0	1.52	1.04	33	.50	.34
Bind	7-foot	1.0	1.16	1.06	48	.56	.51
Bind, horses	7-foot	1.0	1.04	1.98	5	.05	---
Shock	---	1.0	1.75	---	53	.93	---
Haul bundles	---	1.0	3.17	1.31	33	1.05	.43
Haul bundles, truck	---	1.0	5.86	1.34	20	1.17	---
Thresh	26-inch	1.0	3.08	.85	37	1.14	.31
Thresh, contract	26-inch	1.0	1.06	.55	16	.17	.09
Haul grain	---	1.0	1.54	1.05	7	.11	.07
Total harvest						6.48	2.46
Total 1/						11.18	5.85

1/ In addition, horse work averaged 0.10 hour an acre and truck use 0.27 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 28 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy-and livestock area.

The farms surveyed averaged 225 total acres. In 1950, 154 acres were in crops, including 14 in barley. The average yield of barley was approximately 38 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H. , rating of the tractors ranged from 9 to 36; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	2.0	1.45	2.90	58	1.68
Purchased seed	Bu.	2.0	1.90	3.80	42	1.60
Manure	Ton	18.0	1/2.00	36.00	30	10.80
Mixed fertilizer	Cwt.	.95	2.50	2.38	66	1.57
Twine	Lb.	3.6	.25	.90	75	.68
Total materials						16.33

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Thresh	Bu.	38	.05	1.90	31	.59
Total contract work						.59

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	6.31	2.87	30	1.89	0.86
Plow, moldboard	2-16 inch	1.0	1.05	1.00	61	.64	.61
Plow, moldboard	3-14 inch	1.0	.75	.71	39	.29	.28
Disk, tandem	8-foot	1.9	.40	.38	70	.53	.51
Disk, single	15-foot	1.6	.24	.23	15	.06	.06
Harrow, springtooth	12-foot	1.5	.33	.32	25	.12	.12
Harrow, spiketooth	25-foot	1.1	.12	.12	70	.09	.09
Seed, drill	9-foot	1.0	.44	.40	100	.44	.40
Harrow, spiketooth	25-foot	1.1	.11	.11	93	.11	.11
Total preharvest						4.17	3.04
Combine	6-foot	1.0	1.14	1.05	13	.15	.14
Combine	12-foot	1.0	.79	.73	12	.09	.09
Haul from combine		1.0	.63	.43	6	.04	.03
Haul from combine, truck		1.0	.51	.35	19	.10	---
Bind	8-foot	1.0	.99	.90	75	.74	.68
Shock		1.0	1.30	---	75	.98	---
Haul bundles		1.0	3.17	1.44	55	1.74	.79
Haul bundles, horses		1.0	1.76	2.24	20	.35	---
Thresh		1.0	.74	.65	44	.33	.29
Thresh, contract		1.0	.79	.69	31	.24	.21
Haul grain		1.0	.81	.56	25	.20	.14
Haul grain, trucks		1.0	.79	.54	29	.23	---
Total harvest						5.19	2.37
Total 1/						9.36	5.41

1/ In addition, horse work averaged 0.45 hour an acre and truck use 0.22 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 19 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy and cash crop area. Production of barley is concentrated in parts of east central Michigan near Lake Huron and is used primarily by the brewing industry.

The farms surveyed averaged 158 total acres. In 1949, 137 acres were in crops, including 17 in barley. The average yield of barley was 39 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 32; the most common was 22.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.6	2.10	3.36	100	3.36
Manure	Ton	7	2/ 2.00	14.00	62	8.68
Mixed fertilizer (2-12-6)	Cwt.	2.30	2.25	5.18	99	5.13
Spray (2,4-D)	Gal.	.2	4.85	.97	22	.21
Total materials						17.38

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.86	4.86	47	2.28
Hauling	Bu.	39	.03	1.17	15	.18
Total contract work						2.46

1/ Approximately 47 percent of the farmers in this area purchased seed barley.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley area IV-D1, central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.76	1.32	62	2.33	0.82
Plow, moldboard	2-14 inch	1.0	1.26	1.20	31	.39	.37
Disk, tandem	8-foot	1.5	.48	.46	50	.36	.34
Harrow, springtooth	9-foot	2.1	.33	.30	99	.68	.62
Cultipack	9-foot	1.8	.39	.36	23	.16	.15
Disk and harrow	7-foot	3.0	.46	.42	6	.08	.08
Weed	12-foot	1.0	.32	.30	15	.05	.04
Plant	8-foot	1.0	.55	.50	100	.55	.55
Harrow, spiketooth	9-foot	1.0	.35	.32	23	.08	.07
Cultipack	9-foot	1.0	.35	.32	18	.06	.06
Weed by hand	---	1.0	1.58	---	49	.77	---
Spray	18-foot	1.0	.31	.28	22	.07	.06
Total preharvest						5.58	3.16
Windrow	7-foot	1.0	.80	.61	32	.26	.20
Combine	6-foot	1.0	1.23	1.00	53	.65	.53
Combine, contract	6-foot	1.0	1.23	1.00	47	.58	.47
Haul from combine	---	1.0	1.33	.54	85	1.13	.46
Haul, truck, contract	---	1.0	.44	.25	15	.07	---
Total harvest						2.69	1.66
Total 1/						8.27	4.82

1/ In addition, truck use averaged 0.04 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA IV-Fl, 1950

The data presented here are based on a survey of approximatley 24 farms in 1951, in central Wisconsin. These farms are in type-of-farming area IV-Fl, a dairy, livestock, and potato area.

The farms surveyed averaged 166 total acres. In 1950, 104 acres were in crops, including 7 in barley. The average yield of barley was approximately 50 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 26; the most common was about 16.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.9	1.45	2.76	44	1.21
Purchased seed	do.	1.9	2.85	5.42	56	3.04
Manure	Ton	17	1/ 2.00	34.00	46	15.64
Mixed fertilizer	Cwt.	1.50	2.45	3.68	94	3.46
Lime	Ton	.5	7.10	3.55	3	.11
Lime, hydrated	do.	1.4	15.00	26.00	6	1.26
Twine	Lb.	3.9	.27	1.05	59	.62
Total materials						25.34

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	50	.05	2.50	36	.90
Total contract work						.90

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area IV-Fl, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	4.20	1.91	37	1.55	0.71	---
Apply manure, spreader, h.	75-bu.	1.0	3.93	4.28	9	.35	---	0.39
Spread lime	9-foot	1.0	.38	.36	8	.03	.03	---
Fertilize, spreader	9-foot	1.0	.33	.32	4	.01	.01	---
Plow, moldboard	2-14 in.	1.0	1.28	1.22	90	1.15	1.10	---
Disk, tandem	8-foot	2.0	.40	.38	46	.37	.35	---
Harrow, springtooth	12-foot	1.9	.33	.29	60	.38	.33	---
Harrow, spiketooth	15-foot	1.1	.20	.19	26	.06	.05	---
Harrow, spiketooth, h.	15-foot	1.0	.88	1.76	5	.04	---	.09
Cultipack	8-foot	1.0	.45	.43	28	.13	.12	---
Cultipack, horses	8-foot	1.0	.66	1.32	7	.05	---	.09
Seed, drill	8-foot	1.0	.66	.60	89	.59	.53	---
Seed, drill, horses	7-foot	1.0	.90	1.71	11	.10	---	.19
Total preharvest						4.81	3.23	.76
Bind	7-foot	1.0	1.24	.71	59	.73	.42	---
Shock	---	1.0	1.50	---	59	.88	---	---
Haul bundles	---	1.0	4.54	1.28	48	2.18	.61	---
Haul bundles, horses	---	1.0	3.56	2.90	11	.39	---	.32
Thresh	28-inch	1.0	3.29	.62	23	.76	.14	---
Thresh, custom	28-inch	1.0	1.40	.62	36	.50	.22	---
Combine	5-foot	1.0	1.00	.92	41	.41	.38	---
Haul from combine	---	1.0	1.35	.49	10	.14	.05	---
Haul from combine, truck	---	1.0	.89	.35	31	.28	---	---
Total harvest						6.27	1.82	.32
Total 1/						11.08	5.05	1.08

1/ In addition, truck use averaged 0.11 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 40 farms in 1950 producing barley in northeastern Nebraska and southeastern South Dakota. The farms are located in the northwest part of type-of-farming area V-A1, a cattle feeding and hog area.

The farms surveyed averaged 312 total acres. In 1949, 262 acres were in crops, including 31 acres of barley. The average yield of barley was approximately 26 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.0	2.05	4.10	100	4.10
Ceresan	Bu.	2.0	.03	.06	54	.03
Manure	Ton	5	2/ 2.00	10.00	11	1.10
Spray (2,4-D)	Pint	.85	.85	.72	39	.28
Twine	Pound	2.0	.27	.54	26	.14
Total materials						5.65

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Clean and treat seed	Bu.	2.0	.04	.08	29	.02
Threshing	Bu.	26	.05	1.30	23	.30
Total contract work						.32

1/ Approximately 23 percent of the farmers in this area purchased seed barley.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area V-A1, northeastern Nebraska and southeastern South Dakota, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure	---	1.0	1.53	1.39	1	0.02	0.01
Apply manure, spreader	---	1.0	1.84	.84	11	.20	.09
Disk, tandem	10-foot	2.0	.36	.34	11	.08	.07
Disk, single	15-foot	2.1	.22	.21	89	.41	.39
Plow, moldboard	3-16 inch	1.0	.64	.61	10	.06	.06
Harrow, spiketooth	24-foot	1.7	.12	.11	95	.19	.18
Seed, drill	11-foot	1.0	.32	.31	50	.16	.16
Clean and treat seed	---	1.0	.10	---	25	.02	---
Clean and treat seed, contr.	---	1.0	.10	---	29	.03	---
Seed, endgate	---	1.0	.28	.13	38	.11	.05
Seed, endgate, horses	---	1.0	.16	.31	12	.02	---
Roll	15-foot	1.0	.21	.20	15	.03	.03
Spray	24-foot	1.0	.20	.19	39	.08	.07
Total preharvest						1.41	1.11
Windrow	10-foot	1.0	.46	.36	53	.24	.19
Combine, power take-off	5-foot	1.0	.76	.73	37	.28	.27
Combine	8-foot	1.0	.52	.50	37	.19	.18
Haul from combine	---	1.0	.35	.35	74	.26	.26
Bind	10-foot	1.0	1.04	.50	26	.27	.13
Shock	---	1.0	.82	---	26	.21	---
Haul bundles, horses	---	1.0	.82	3.42	26	.21	---
Thresh	---	1.0	.48	.29	3	.01	.01
Thresh, contract	---	1.0	.48	.29	23	.11	.07
Haul from thresher	---	1.0	.63	.57	26	.16	.15
Total harvest						1.94	1.26
Total 1/						3.35	2.37

1/ In addition, horse work averaged 0.93 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 41 farms in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 370 total acres per farm. In 1949, 305 acres were in crops, including 40 acres in barley. The average yield of barley was approximately 24 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.8	1.65	2.97	100	2.97
Ceresan	Bu.	1.8	.05	.09	28	.05
Manure	Ton	4	2/ 2.00	8.00	7	.56
Mixed fertilizer	Cwt.	1.15	2.70	3.10	11	.34
Spray (2,4-D)	Pint	.8	.70	.56	45	.25
Twine	Lb.	2.4	.23	.55	23	.13
Total materials						4.30

CONTRACT WORK HIRED

Combining	Acre	1.0	3.70	3.70	8	.30
Haul from combine	Bu.	24	.03	.72	17	.12
Threshing	Bu.	24	.04	.96	19	.18
Total contract work						.60

1/ Approximately 23 percent of the farmers in this area purchased seed barley.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area V-F4, northeastern South Dakota, and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	2.20	1.00	7	0.15	0.07
Plow, moldboard	2-14 inch	1.0	1.19	1.13	12	.14	.14
Plow, moldboard	3-14 inch	1.0	.80	.77	52	.42	.40
Plow, moldboard	5-14 inch	1.0	.50	.47	10	.05	.05
Disk, tandem	10-foot	1.7	.36	.34	11	.07	.06
Disk, single	15-foot	1.7	.25	.24	59	.25	.24
Field cultivate	10-foot	1.2	.49	.47	16	.09	.09
Harrow, spiketooth	25-foot	1.4	.12	.11	100	.17	.15
Clean seed	---	1.0	.11	---	23	.03	---
Clean and treat seed	---	1.0	.11	---	28	.03	---
Drill	11-foot	1.0	.32	.31	100	.32	.31
Harrow, spiketooth	25-foot	1.0	.12	.11	40	.05	.04
Spray	30-foot	1.0	.18	.13	45	.08	.06
Total preharvest						1.85	1.61
Windrow	10-foot	1.0	.34	.33	77	.26	.25
Combine	6-foot	1.0	.65	.59	31	.20	.18
Combine	10-foot	1.0	.49	.45	24	.12	.11
Combine, self-propelled	12-foot	1.0	.35	.32	14	.05	---
Combine, contract	10-foot	1.0	.49	.45	8	.04	.03
Haul from combine	---	1.0	.29	.22	60	.17	.13
Haul from combine, contract	---	1.0	.29	.22	17	.05	.04
Bind	8-foot	1.0	1.03	.53	9	.09	.05
Bind	10-foot	1.0	.67	.36	14	.09	.05
Shock	---	1.0	.94	---	23	.22	---
Haul bundles	---	1.0	1.96	1.34	5	.10	.07
Haul bundles, h.	---	1.0	1.58	2.87	18	.28	---
Thresh	26-inch	1.0	.33	.29	4	.01	.01
Thresh, contract	26-inch	1.0	.30	.29	19	.06	.06
Haul grain, truck	---	1.0	.29	.25	17	.05	---
Total harvest						1.79	.98
Total 1/						3.64	2.59

1/ In addition, horse work averaged 0.52 hour an acre, truck use 0.04 hour an acre, and self-propelled combines 0.04 hour an acre.

DRY BEANS: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 28 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy-and cash-crop area.

The farms surveyed averaged 128 total acres. In 1949, 106 acres were in crops including 26 in dry beans. The average yield of dry beans was 20 bushels an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	.7	4.90	3.43	100	3.43
Clover seed 2/	Lb.	17	.25	4.25	58	2.46
Manure	Ton	8	3/2.00	16.00	25	4.00
Fertilizer (2-12-6)	Cwt.	1.80	1.85	3.33	76	2.53
Total materials						12.42

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.25	5.25	7	.37
Threshing	Bu.	20	.14	2.80	21	.59
Hauling	Bu.	20	.04	.80	12	.10
Total contract work						1.06

1/ Approximately 32 percent of the farmers in this area purchased dry bean seed.

2/ Approximately 41 percent of the clover was seeded with small grain and plowed under in the spring.

3/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting dry beans, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cover crop:							
Seed by hand	---	1.0	0.40	---	5	0.02	---
Seed	8-foot	1.0	.46	0.42	12	.06	.05
Preharvest:							
Apply manure, spreader	---	1.0	3.76	1.32	25	.94	.33
Plow, moldboard	2-14 inch	1.0	1.16	1.11	100	1.16	1.11
Disk, tandem	8-foot	1.6	.44	.42	59	.41	.40
Harrow, springtooth	9-foot	2.9	.41	.39	70	.83	.79
Cultipack	9-foot	1.6	.41	.38	24	.16	.15
Harrow and cultipack	9-foot	2.6	.39	.36	33	.33	.31
Disk and cultipack	8-foot	2.5	.43	.39	5	.05	.05
Disk and harrow	9-foot	2.5	.36	.33	18	.16	.15
Fertilize, drill	8-foot	1.0	.43	.39	8	.03	.03
Plant	4-row	1.0	.54	.49	100	.54	.49
Roll	10-foot	1.0	.48	.44	7	.03	.03
Cultivate, first	2-row	1.0	.86	.81	100	.86	.81
Cultivate, other	2-row	1.9	.53	.50	100	1.01	.95
Weed by hand	---	1.0	8.70	---	4	.35	---
Weed	12-foot	1.0	.48	.44	7	.03	.03
Total preharvest						6.97	5.68
Pull	2-row	1.0	.71	.65	100	.71	.65
Rake, side-delivery	---	1.0	.57	.52	34	.19	.18
Turn by hand	---	1.0	2.32	---	16	.37	---
Combine	6-foot	1.0	.95	.73	54	.51	.39
Combine, contract	6-foot	1.0	.61	.52	7	.04	.04
Haul from combine	---	1.0	1.35	.43	49	.66	.21
Haul, contract	---	1.0	.36	.20	12	.04	---
Stack and pile	---	1.0	2.36	---	34	.80	---
Thresh and haul	---	1.0	7.55	1.98	18	1.36	.36
Thresh and haul, contract 1/	---	1.0	6.08	1.59	21	1.28	.33
Total harvest						5.96	2.16
Total 2/						12.93	7.84

1/ In this area the contract operator supplied an average of 0.16 hour of man labor and 0.10 hour of tractor power.

2/ In addition, truck use averaged 0.02 hour an acre.

CLOVER, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck, and mixed farming area on the eastern shore of Lake Michigan. Approximately 100 percent of the clover in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted two years. As a result one-half of the man labor, power and machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-half of this is charged annually to the hay crop. All additional materials such as clover, timothy and grass seeds and man labor, power and machinery used directly in establishing the hay crop are prorated also to the annual charges for the hay crop according to the average life of the seeding.

The farms surveyed averaged 134 total acres. In 1950, 110 acres were in crops, including 20 acres of clover and timothy cut for hay. The average yield of such hay was approximately 1.7 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Red clover seed	Lb.	8	0.50	4.00	100	4.00
Alsike clover seed	Lb.	3	.45	1.35	15	.20
Mammoth clover seed	Lb.	8	.25	2.00	5	.10
Timothy seed	Lb.	3	.20	.60	14	.08
Manure	Ton	8	1/2.00	16.00	30	2/ 2.40
Mixed fertilizer	Cwt.	2.30	2.50	5.75	35	2/ 1.00
Phosphate fertilizer	Cwt.	1.50	.60	.90	7	2/ .03
Superphosphate fertilizer	Cwt.	1.00	2.25	2.25	3	2/ .04
Lime	Ton	1.8	3.20	5.76	3	.17
Marl	Yd.	8.8	1.55	13.64	4	.55
Total for establishment						8.57
Annual charge to clover						4.28
Baler twine	Lb.	3.5	.25	.88	40	.35
Total materials						4.63

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	51	.11	5.61	29	1.63
Total contract work						1.63

1/ Estimated.

2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting mixed clover hay, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Establish seeding:							
Total clover hay 1/	---	---	---	---	---	2.20	1.77
Annual 2/						1.10	.89
Harrow, springtooth	---	1.0	0.32	0.30	70	.22	.21
Total preharvest						1.32	1.10
Mow	6-foot	1.2	.59	.51	87	.62	.53
Mow, horses	5-foot	1.2	1.52	2.79	13	.24	---
Rake, side-delivery	9-foot	1.2	.49	.45	90	.53	.49
Rake, side-delivery, h.	9-foot	1.2	.78	1.50	10	.09	---
Haul loose hay	---	1.2	3.84	.76	42	1.94	.38
Haul loose hay, horses	---	1.2	4.19	2.91	8	.40	---
Bale, pick-up	---	1.2	.66	.58	11	.09	.08
Bale, custom	---	1.2	.69	.51	29	.24	.18
Haul baled hay	---	1.2	1.78	.34	40	.85	.16
Field chop	---	1.2	1.02	.93	10	.12	.11
Haul and blow into silo	---	1.2	1.87	.67	10	.22	.08
Total harvest						5.34	2.01
Total 3/						6.66	3.11

1/ In this area approximately 100 percent of the farms seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of mixed clover hay seedings in this area is approximately two years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to average life of stand.

3/ In addition horse work averaged 0.90 hour an acre.

CLOVER, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 24 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy-and cash-crop area. Approximately 100 percent of the clover in this area is planted with a nurse crop. Farmers in the area reported that hay seedings lasted about 2 years. As a result one-half of the man labor, power, machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-half of this is charged annually to the hay crop. All additional materials such as clover, timothy, and grass seeds, and man labor, power and machinery used directly in establishing the hay seeding are prorated also to the annual charges for the hay crop according to the estimated life of the seeding.

The farms surveyed averaged 186 total acres. In 1949, 132 acres were in crops, including 16 in clover cut for hay. The average yield of hay was approximately 1.4 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Red clover seed	Lb.	10	0.55	5.50	100	5.50
Timothy seed	Lb.	5	.10	.50	33	.16
Brome seed	Lb.	6	.45	2.70	11	.30
Inoculant	Lb.	10	.01	.10	95	.10
Manure	Ton	7	1/ 2.00	14.00	10	2/ .70
Fertilizer (2-12-6)	Cwt.	2.90	2.10	6.09	9	2/ .28
Limestone	Ton	1.0	3.35	3.35	8	.27
Total for establishment						7.31
Annual charge to clover	---	---	---	---	---	3.66
Baler twine	Lb.	1/4.2	1/.25	1.05	24	.25
Total annual charge						3.91

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	50	.11	5.50	7	.38
Total contract work						.38

1/ Estimated.
2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting mixed clover hay, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Establish seeding:							
Total clover 1/	---	---	---	---	---	2.14	1.75
Annual 2/	---	---	---	---	---	1.07	.88
Total preharvest	----	---	---	---	---	1.07	.88
Mow	7-foot	1.0	0.80	0.70	100	.80	.70
Rake side-delivery	---	1.0	.64	.59	100	.64	.59
Haul loose hay	---	1.0	3.36	.84	76	2.55	.64
Bale	---	1.0	.84	.73	11	.09	.08
Bale	---	1.0	1.51	.44	6	.09	.03
Bale, contract	---	1.0	.84	.73	7	.06	.05
Haul baled hay	---	1.0	2.58	.49	24	.62	.12
Total harvest						4.85	2.21
Total						5 92	3.09

1/ Approximately 100 percent of the farms in this area seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of mixed clover hay seeding in this area is approximately 2 years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of the seeding.

CLOVER, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey in 1951 of approximately 28 farms in central Wisconsin. These farms are in type-of-farming area IV-F1, a dairy, livestock and potato area. Approximately 100 percent of the clover in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted two years. As a result, one-half of the labor, power and machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-half of this is charged annually to the hay crop. All additional materials, such as clover, alfalfa, and grass seeds and man labor, power and machinery used directly in establishing the hay crop are prorated also to the annual charges for the hay crop according to the estimated life of the seeding.

The farms surveyed averaged 139 total acres. In 1950, 83 acres were in crops including 20 acres in mixed clover cut for hay. The average yield of hay was approximately 3.2 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 31; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Red clover seed	Lb.	9	0.55	4.95	100	4.95
Timothy seed	Lb.	4	.20	.80	15	.12
Alfalfa seed	Lb.	3	.50	1.50	5	.08
Alsike clover seed	Lb.	5	.60	3.00	2	.06
Ladino clover seed	Lb.	1	2.50	2.50	2	.05
Manure	Ton	13	1/ 2.00	26.00	32	2/ 4.16
Mixed fertilizer	Cwt.	1.45	2.55	3.70	86	2/ 1.59
Lime	Ton	.7	2.10	1.47	17	.25
Total for establishment						11.26
Annual charge to clover	---	---	---	---	---	5.63
Baler twine	Lb.	3.5	.25	.88	13	.11
Total materials used						5.74

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	87.5	.10	8.75	2	.18
Total contract work						.18

1/ Estimated.

2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting mixed clover hay, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding:								
Total clover hay 1/	---	---	---	---	---	2.72	1.90	0.23
Annual 2/	---	---	---	---	---	1.36	.95	.12
Harrow, springtooth	12-foot	1.0	0.35	0.34	82	.29	.28	---
Total preharvest						1.65	1.23	.12
Mow, first cutting	7-foot	1.0	.73	.64	84	.61	.54	---
Mow, first cutting, horses	5-foot	1.0	1.68	3.08	16	.27	---	.49
Mow, second cutting	7-foot	1.0	.96	.84	37	.36	.31	---
Rake, first cutting, S.D.	9-foot	1.0	.59	.54	85	.50	.46	---
Rake, first cutting, horses	10-foot	1.0	.90	1.38	15	.14	---	.21
Rake, second cutting, S.D.	9-foot	1.0	.69	.63	29	.20	.18	---
Rake, second cutting, horses	9-foot	1.0	.79	.99	8	.06	---	.08
Haul, loose hay	---	1.4	3.83	.96	59	3.16	.79	---
Haul loose hay, horses	---	1.4	3.70	1.54	12	.62	---	.26
Field chop	---	1.4	1.53	1.40	16	.34	.31	---
Haul to silo	---	1.4	1.05	.75	16	.24	.17	---
Blow into silo	---	1.4	2.10	1.50	16	.47	.34	---
Bale, pick-up	---	1.4	1.56	1.38	11	.24	.21	---
Bale, contract	---	1.4	1.25	1.10	2	.04	.03	---
Haul baled hay	---	1.4	2.16	.45	13	.39	.08	---
Total harvest						7.64	3.42	1.04
Total						9.29	4.65	1.16

1/ In this area approximately 100 % of the farms seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of mixed clover hay seeding in this area is approximately two years. Consequently one-half of the labor, power and machinery charged to establishing the seeding is charged annually to the hay crop.

CLOVER HAY: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 33 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy-and general-farming area on the Lake Erie border. Approximately 100 percent of the clover in this area is planted without a nurse crop. Farmers in the area reported that hay seedings last about 2 years. Consequently the annual charges are based upon a 2-year stand. The clover seeded in this area is usually planted with timothy.

The farms surveyed averaged 170 total acres. In 1949, 104 acres were in cropland, including 19 acres of clover cut for hay. The average yield of hay was 2.2 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 26; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Red clover seed	Lb.	8	0.58	4.64	100	4.64
Timothy seed	do.	5	.30	1.50	100	1.50
Alfalfa seed	do.	4	.65	2.60	28	.73
Alsike clover seed	do.	3	.49	1.47	24	.35
Ladino clover seed	do.	1	2.32	2.32	14	.32
Manure	Ton	8	[1]2.00	16.00	32	5.12
Mixed fertilizer	Cwt.	2.90	2.20	6.38	97	6.19
Lime	Ton	1.9	3.85	7.32	94	6.88
Total for establishment						25.73
Annual charge to clover	---	---	---	---	---	12.86
Manure	Ton	8	[1]2.00	16.00	29	4.64
Baler, twine	Lb.	8.7	.32	2.78	44	1.22
Total materials used						18.72

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	58	.10	5.80	14	.81
Total contract work						.81

[1] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting clover hay, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding, total	---	---	---	---	---	7.94	4.55	2.96
Establish seeding, annual	---	---	---	---	1/	3.97	2.28	1.48
Apply manure, spreader	75 bu.	1.0	5.72	2.00	29	1.66	.58	---
Total preharvest						5.63	2.86	1.48
Mow	7-foot	1.3	.68	.60	80	.70	.62	---
Mow, horses	5-foot	1.3	1.43	2.62	20	.37	---	.68
Rake, side-delivery	---	1.3	.56	.51	78	.57	.51	---
Rake, side-dilivery, h.	---	1.3	.78	1.50	22	.22	---	.43
Haul loose hay	---	1.3	4.68	.81	49	2.98	.51	---
Haul loose hay, h.	---	1.3	4.44	6.45	7	.40	---	.59
Bale, pick-up	---	1.3	1.08	.72	30	.42	.28	---
Bale, pick-up, contract	---	1.3	.64	.56	14	.12	.10	---
Haul baled hay	---	1.3	3.59	.47	44	2.05	.27	---
Total harvest						7.83	2.29	1.70
Total						13.46	5.15	3.18

1/ In this area approximately 100 percent of the farms seeded clover hay without a nurse crop, and the average life of the crop is 2 years.

CLOVER, MIXED HAY: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey made of approximately 40 farms in 1950 in southeastern Ohio. These farms are in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley. Approximately 100 percent of the clover in this area is planted with a nurse crop. Farmers in the area reported that hay seedings lasted about 2 years. As a result one-half of the man labor, power, machinery and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop, and one-half of this is charged annually to the hay crop. All additional materials such as clover, alfalfa, and grass seeds, and man labor, power, and machinery used directly in establishing the hay seeding are prorated to the annual charges for the hay crop according to the estimated life of the seeding.

Most farmers in the area seed mixed clovers in combination with timothy or alfalfa.

The farms surveyed averaged 207 total acres. In 1949, 93 acres were in crops, including 12 acres of clover cut for hay. The average yield of hay was approximately 1.9 tons an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding, total:						
Red clover seed	Lb.	9	0.55	4.95	100	4.95
Timothy seed	Lb.	6	.30	1.80	86	1.55
Alfalfa seed	Lb.	5	.60	3.00	56	1.68
Ladino clover seed	Lb.	1	2.35	2.35	17	.40
Alsike clover seed	Lb.	3	.50	1.50	13	.20
Manure	Ton	8	1/2.00	16.00	72	2/5.76
Mixed fertilizer	Cwt.	3.10	2.10	6.51	98	2/3.19
Limestone	Ton	2.4	3.80	9.12	81	7.39
Total for establishment						25.12
Annual charge to clover	---	---	---	---	---	12.56
Baler twine	Lb.	7.6	.30	2.28	17	.39
Total annual charge						12.95

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Baling	Bale	69.8	11	7.68	10	.77
Total contract work						.77

1/ Estimated. 2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting mixed clover hay, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Establish seeding:								
Total clover 1/	---	---	---	---	---	4.91	1.85	2.72
Annual 2/	---	---	---	---	---	2.46	.92	1.36
Total preharvest						2.46	.92	1.36
Mow	6-foot	1.7	0.65	0.57	79	.87	.77	---
Mow, horses	6-foot	1.7	1.32	2.42	21	.47	---	.86
Rake, side-delivery	---	1.7	.53	.48	71	.64	.58	---
Rake, dump, horses	---	1.7	.70	1.34	29	.35	---	.66
Haul loose hay	---	1.7	5.39	.94	63	5.77	1.00	---
Haul loose hay, horses	---	1.7	3.67	2.92	20	1.25	---	.99
Bale, pick-up	---	1.7	1.34	.90	7	.16	.11	---
Bale, pick-up, contract	---	1.7	.67	.59	10	.11	.10	---
Haul baled hay	---	1.7	3.15	.49	12	.64	.10	---
Haul baled hay, horses	---	1.7	2.46	1.79	5	.21	---	.15
Total harvest						10.47	2.66	2.66
Total						12.93	3.58	4.02

1/ Approximately 100 percent of the farms in this area seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of mixed clover hay seeding in this area is approximately 2 years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of the seeding.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 26 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck-and general-farming area on the eastern shore of Lake Michigan.

The farms surveyed averaged 203 total acres. In 1950, 131 acres were in crops including 15 in corn for grain. The average yield of corn was approximately 45 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.14	5.65	0.79	27	0.21
Purchased seed	Bu.	.14	11.30	1.58	73	1.15
Manure	Ton	6	1/2.00	12.00	73	8.76
Mixed fertilizer	Cwt.	1.80	2.40	4.32	83	3.59
Limestone	Ton	3.5	3.00	10.50	3	.32
Total materials						14.03

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking, 1-row	Acre	1.0	4.95	4.95	36	1.78
Picking, 2-row	Acre	1.0	4.95	4.95	10	.50
Total contract						2.28

1/ Estimated

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	0.98	0.44	70	0.69	0.31	---
Apply manure, horses-sp.	80-bu.	1.0	5.94	5.40	3	.18	---	0.16
Plow, moldboard	2-14 inch	1.0	1.38	1.31	100	1.38	1.31	---
Disk, tandem	7-foot	1.8	.41	.39	48	.36	.34	---
Harrow, springtooth	12-foot	1.9	.36	.35	76	.52	.50	---
Harrow, spiketooth	8-foot	2.6	.28	.26	24	.18	.16	---
Plant	2-row	1.0	.86	.75	94	.81	.70	---
Plant, horses	2-row	1.0	1.14	2.18	5	.06	---	.11
Plant by hand	---	1.0	7.85	---	1	.08	---	---
Cultivate, first	2-row	1.0	1.03	.99	95	.98	.94	---
Cultivate, first, horses	1-row	1.0	2.20	4.20	5	.11	---	.21
Cultivate, other	2-row	3.0	.52	.47	95	1.48	1.34	---
Cultivate, other, horses	1-row	3.5	1.41	2.58	5	.25	---	.45
Weed	10-foot	1.7	.22	.21	12	.04	.04	---
Weed, horses	5-foot	1.0	.55	1.05	3	.02	---	.03
Total preharvest						7.14	5.64	.96
Pick by hand and haul	---	1.0	9.75	6.36	21	2.05	1.34	---
Pick by hand and haul, h.	---	1.0	12.10	8.42	4	.48	---	.34
Pick by machine	1-row	1.0	2.99	1.43	18	.54	.26	---
Pick by machine, contract	1-row	1.0	1.45	1.16	36	.52	.42	---
Pick by machine	2-row	1.0	1.23	.79	11	.14	.09	---
Pick by machine, contract	2-row	1.0	1.30	.99	10	.13	.10	---
Haul from picker	---	1.0	1.29	.38	73	.94	.28	---
Haul from picker, horses	---	1.0	2.40	.80	2	.05	---	.02
Total harvest						4.85	2.49	.36
Total						12.01	8.14	1.32

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 31 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 147 total acres. In 1950, 113 acres were in crops, including 15 in corn for grain. The average yield of corn was approximately 64 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 26; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.15	10.35	1.55	100	1.55
Manure	Ton	17	1/ 2.00	34.00	80	27.20
Mixed fertilizer	Cwt.	1.65	2.45	4.04	90	3.64
Limestone	Ton	.25	3.50	.88	3	.03
Twine	Lb.	6.5	.27	1.76	10	.18
Total materials						32.60

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking 1-row	Acre	1.0	4.50	4.50	39	1.76
Picking 2-row	Acre	1.0	4.85	4.85	20	.97
Total contract work						2.73

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area IV-A-2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	7.64	3.02	80	6.11	2.42
Plow, moldboard	3-14 inch	1.0	.81	.78	36	.29	.28
Plow, moldboard	2-14 inch	1.0	1.29	1.23	64	.83	.79
Field cultivate	9-foot	1.9	.43	.41	20	.16	.16
Disk, tandem	8-foot	1.9	.52	.49	69	.68	.64
Quackdig	9-foot	3.3	.40	.38	14	.18	.18
Harrow, springtooth	12-foot	1.9	.31	.29	35	.21	.19
Harrow, spiketooth	15-foot	1.7	.17	.17	88	.26	.26
Cultipack,	8-foot	1.0	.74	.70	7	.05	.05
Plant	2-row	1.0	.56	.54	76	.43	.41
Plant, horses	2-row	1.0	.92	1.85	24	.22	---
Cultivate, blind	2-row	1.0	.47	.45	3	.01	.01
Cultivate, first	2-row	1.0	.92	.88	100	.92	.88
Cultivate, other	2-row	2.9	.53	.48	100	1.54	1.39
Weed, rotary hoe	---	3.0	.34	.33	4	.04	.04
Total preharvest						11.93	7.70
Pick, machine	1-row	1.0	1.48	1.42	31	.46	.44
Pick, machine, contract	1-row	1.0	1.19	1.13	39	.46	.44
Pick, machine, contract	2-row	1.0	.99	.94	20	.20	.19
Haul from picker	---	1.0	2.02	.82	86	1.74	.71
Haul from picker, horses	---	1.0	1.64	2.38	4	.07	---
Bind	1-row	1.0	1.39	1.27	10	.14	.13
Shock by hand	---	1.0	2.93	---	10	.29	---
Haul to shredder	---	1.0	2.09	.87	3	.06	.03
Haul to shredder, horses	---	1.0	6.98	4.66	7	.49	---
Shred	---	1.0	1.64	1.50	10	.16	.15
Total harvest						4.07	2.09
Total 1/						16.00	9.79

1/ In addition, horse work averaged 0.87 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 28 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 175 total acres. In 1950, 116 acres were in crops, including 16 in corn for grain. The average yield of corn for grain was approximately 34 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 28; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.14	5.30	0.74	10	0.07
Purchased seed	Bu.	.14	10.60	1.48	90	1.33
Manure	Ton	14	1/ 2.00	28.00	52	14.56
Mixed fertilizer	Cwt.	.90	3.05	2.74	66	1.81
Twine	Lb.	3.5	.23	.80	10	.08
Total materials						17.85

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Planting	Acre	1.0	1.50	1.50	4	.06
Picking	Acre	1.0	3.90	3.90	38	1.48
Binding	Acre	1.0	2.50	2.50	4	.10
Total contract work						1.64

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	3.28	1.26	52	1.71	0.66
Plow, moldboard	2-14 inch	1.0	1.26	1.21	76	.96	.92
Plow, moldboard	3-14 inch	1.0	.77	.74	24	.18	.18
Disk, tandem	8-foot	1.4	.44	.42	44	.27	.26
Disk, single	12-foot	2.4	.37	.36	23	.20	.20
Harrow, springtooth	12-foot	1.7	.26	.25	55	.24	.23
Harrow, spiketooth	20-foot	2.0	.18	.17	73	.26	.25
Plant	2-row	1.0	.74	.70	96	.71	.67
Plant, contract	2-row	1.0	.77	.74	4	.03	.03
Cultivate, first	2-row	1.0	.73	.69	100	.73	.69
Cultivate, other	2-row	3.0	.52	.47	100	1.56	1.41
Total preharvest						6.85	5.50
Pick by machine	1-row	1.0	2.44	2.33	31	.76	.72
Pick by machine	2-row	1.0	.70	.67	21	.15	.14
Pick by machine, contract	1-row	1.0	1.06	1.01	34	.36	.34
Pick by machine, contract	2-row	1.0	1.31	1.25	4	.05	.05
Haul from picker	---	1.0	1.67	.74	90	1.50	.67
Bind	1-row	1.0	1.15	1.05	6	.07	.06
Bind, contract	1-row	1.0	1.15	1.05	4	.05	.04
Shock by hand	---	1.0	2.09	---	10	.21	---
Haul to shredder	---	1.0	1.99	.56	10	.20	.06
Shred	---	1.0	3.45	1.58	10	.34	.16
Haul from shredder	---	1.0	1.67	.74	4	.07	.03
Total harvest						3.76	2.27
Total						10.61	7.77

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 31 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy-and livestock area.

The farms surveyed averaged 218 total acres. In 1950, 158 acres were in crops, including 37 in corn. The average yield of corn for grain was approximately 50 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 13 to 27; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.15	5.95	.89	11	0.10
Purchased seed	Bu.	.15	11.90	1.78	89	1.58
Manure	Ton	15	1/ 2.00	30.00	58	17.40
Mixed fertilizer	Cwt.	1.90	2.65	5.04	44	2.22
Limestone	Ton	2.1	2.10	4.41	3	.13
Twine	Lb.	4.1	.25	1.02	6	.06
Total materials						21.49

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking, 1-row	Acre	1.0	5.70	5.70	2	.11
Picking, 2-row	Acre	1.0	4.40	4.40	11	.48
Total contract work						.59

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	6.09	1.98	8	0.49	0.16
Apply manure, horses-sp.	75-bu.	1.0	12.21	10.66	50	6.10	---
Fertilize, spreader	8-foot	1.0	.63	.60	9	.06	.05
Plow, moldboard	2-14 inch	1.0	1.26	1.21	62	.78	.75
Plow, moldboard	3-14 inch	1.0	.79	.76	38	.30	.29
Field, cultivate	8-foot	1.5	.29	.27	11	.05	.04
Disk, tandem	8-foot	1.9	.36	.35	40	.27	.27
Disk, single	15-foot	1.8	.24	.23	43	.19	.18
Harrow, springtooth	12-foot	1.9	.36	.35	26	.18	.17
Harrow, spiketooth	20-foot	3.7	.15	.15	100	.56	.56
Plant	2-row	1.0	.70	.67	53	.37	.36
Plant, horses	2-row	1.0	.79	1.55	22	.17	---
Plant	4-row	1.0	.29	.28	25	.07	.07
Cultivate, first	2-row	1.0	.84	.80	100	.84	.80
Cultivate, other	2-row	2.8	.45	.41	100	1.26	1.15
Total preharvest						11.69	4.85
Pick by machine	1-row	1.0	1.74	1.51	26	.45	.39
Pick by machine	2-row	1.0	.78	.75	55	.43	.41
Pick by machine, contract	1-row	1.0	1.32	1.26	2	.03	.03
Pick by machine, contract	2-row	1.0	.74	.70	11	.08	.08
Haul from picker	---	1.0	1.31	.49	94	1.23	.46
Bind	1-row	1.0	1.08	.99	4	.04	.04
Bind, horses	1-row	1.0	1.76	3.37	2	.04	---
Shock by hand	---	1.0	3.42	---	6	.21	---
Haul to shredder	---	1.0	6.77	.94	6	.41	.06
Shred	---	1.0	1.08	.99	6	.06	.06
Total harvest						2.98	1.53
Total 1/						14.67	6.38

1/ In addition, horse work averaged 5.74 hours an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 40 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy and cash crop area.

The farms surveyed averaged 161 total acres. In 1949, 111 acres were in crops, including 17 in corn harvested for grain. The average yield of corn for grain was 61 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	0.15	6.20	0.93	4	0.04
Purchased seed corn	Bu.	.15	9.40	1.41	96	1.35
Sweet clover seed 1/	Lb.	11	.21	2.31	18	.42
Manure	Ton	11	2/ 2.00	22.00	63	13.86
Fertilizer (2-12-6)	Cwt.	1.80	2.15	3.87	97	3.75
Spray (2,4-D)	Gal.	.1	7.45	.74	13	.10
Twine	Lb.	2/3.5	2/ .25	.88	29	.26
Total materials						19.78

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	4.90	4.90	22	1.08
Total contract work						1.08

1/ Sweet clover was seeded with small grain the year before and plowed under in the spring.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.76	1.32	63	2.37	0.83
Plow, moldboard	2-14 inch	1.0	1.39	1.27	100	1.39	1.27
Disk, tandem	8-foot	1.9	.46	.44	60	.52	.50
Harrow, springtooth	9-foot	2.9	.39	.36	75	.85	.78
Cultipack	9-foot	1.3	.44	.40	28	.16	.15
Harrow and cultipack	9-foot	2.4	.46	.42	27	.30	.27
Disk and cultipack	8-foot	2.8	.41	.38	6	.07	.06
Fertilize, drill	7-foot	1.0	.77	.70	2	.02	.01
Plant	2-row	1.0	.73	.62	100	.73	.62
Harrow, spiketooth	9-foot	1.5	.36	.32	2	.01	.01
Weed	12-foot	1.6	.32	.29	19	.10	.09
Weed, rotary hoe	2-row	1.5	.40	.37	8	.05	.04
Cultivate, first	2-row	1.0	.93	.87	100	.93	.87
Cultivate, other	2-row	2.3	.60	.57	100	1.38	1.31
Weed by hand	---	1.0	2.18	---	9	.20	---
Spray		1.0	2.25	1.98	13	.29	.26
Total preharvest						9.37	7.07
Pick by machine	1-row	1.0	1.44	1.35	49	.71	.66
Pick by machine, contract	1-row	1.0	1.44	1.35	22	.32	.30
Haul from picker	---	1.0	1.36	.78	71	.97	.55
Cut by hand and shock	---	1.0	10.70	---	1	.11	---
Bind	1-row	1.0	1.50	1.38	28	.42	.39
Shock by hand	---	1.0	3.80	---	28	1.06	---
Shred and haul	---	1.0	10.00	3.20	20	2.00	.64
Husk from shock	---	1.0	8.30	---	9	.75	---
Haul from shock	---	1.0	2.82	1.61	9	.25	.14
Total harvest						6.59	2.68
Total						15.96	9.75

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey made in 1951 of approximately 33 farms producing corn, in central Wisconsin. These farms are in type-of-farming area IV-F1, a dairy and general farming area.

The farms surveyed averaged 126 total acres per farm. In 1950, 97 acres were in crops, including 11 in corn for grain. The average yield of corn was approximately 54 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 10 to 29; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.15	11.10	1.66	100	1.66
Manure	Ton	16	[1]2.00	32.00	85	27.20
Mixed fertilizer	Cwt.	1.60	2.50	4.00	88	3.52
Limestone	Ton	3.05	1.70	5.18	11	.57
Twine	Lb.	4.5	.25	1.12	19	.21
Total materials						33.16

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	4.40	4.40	43	1.89
Total contract work						1.89

[1] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	7.77	2.94	81	6.29	2.38
Apply manure, horses-sp.	80-bu.	1.0	7.33	5.32	4	.29	---
Spread lime, spreader	75-bu.	1.0	1.38	1.32	5	.07	.07
Plow, moldboard	2-14 inch	1.0	1.30	1.24	100	1.30	1.24
Disk, tandem	8-foot	1.8	.41	.39	82	.61	.57
Harrow, springtooth	12-foot	2.4	.33	.32	36	.28	.28
Quackdig	8-foot	4.8	.44	.42	13	.27	.26
Harrow, spiketooth	12-foot	2.2	.22	.21	96	.46	.44
Cultipack	9-foot	1.0	.44	.42	2	.01	.01
Cultivate, first	2-row	1.0	.99	.94	100	.99	.94
Plant, horses	2-row	1.0	.88	1.68	17	.15	---
Plant	2-row	1.0	.85	.74	83	.71	.61
Cultivate, other	2-row	3.5	.55	.50	95	1.82	1.66
Total preharvest						13.25	8.46
Pick by hand and haul	---	1.0	10.10	.57	7	.71	.04
Pick by machine	1-row	1.0	1.22	1.17	26	.32	.30
Pick by machine, contract	1-row	1.0	1.14	1.09	43	.49	.47
Haul from picker	---	1.0	.94	.53	69	.65	.37
Bind	1-row	1.0	1.15	1.05	17	.20	.18
Bind, horses	1-row	1.0	1.31	2.51	7	.09	---
Shock by hand	---	1.0	2.61	---	19	.50	---
Haul to shredder	---	1.0	4.56	.50	18	.82	.09
Haul to shredder, horses	---	1.0	4.39	2.93	6	.26	---
Shred	---	1.0	1.84	1.12	24	.44	.27
Total harvest						4.48	1.72
Total 1/						17.73	10.18

1/ In addition, horse work averaged 0.85 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 36 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy-and general-farming area on the Lake Erie border.

The farms surveyed averaged 152 total acres. In 1949, 94 acres were in cropland, including 22 acres in corn. The average yield of corn was 58 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 34; the most common was about 16.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Own seed	Bu.	.17	5.40	0.92	8	0.07
Purchased seed	do.	.17	9.65	1.64	92	1.51
Manure	Ton	9	[1]2.00	18.00	60	10.80
Mixed fertilizer	Cwt.	2.65	2.30	6.10	100	6.10
Lime	Ton	1.3	[2]4.50	5.85	12	.70
Spray (2,4-D)	Gal.	.06	8.00	.48	17	.08
Twine	Lb.	2.4	.25	.60	16	.10
Total materials						19.36

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	7.50	7.50	16	1.20
Total contract work						1.20

[1] Estimated.

[2] Price includes cost of spreading.

Man labor, power, and machinery used by operation in producing and harvesting corn, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	4.77	1.90	44	2.10	0.84	---
Apply manure, horses-sp.	65-bu.	1.0	5.73	10.42	16	.92	---	1.67
Plow, moldboard	2-14 inch	1.0	1.50	1.43	96	1.44	1.37	---
Plow, moldboard, horses	1-14 inch	1.0	7.50	20.03	4	.30	---	.80
Disk, tandem	7-foot	2.4	.46	.44	93	1.02	.99	---
Harrow, spiketooth	12-foot	1.8	.40	.37	62	.45	.42	---
Harrow, spiketooth, h.	12-foot	3.3	1.26	3.63	4	.17	---	.48
Cultipack	8-foot	1.4	.41	.38	19	.11	.10	---
Cultipack, horses	8-foot	1.0	.76	1.45	3	.02	---	.04
Plant	2-row	1.0	.90	.60	67	.60	.40	---
Plant, horses	2-row	1.0	1.12	2.20	33	.37	---	.73
Harrow, spiketooth	12-foot	1.4	.34	.32	30	.14	.14	---
Harrow, spiketooth, h.	12-foot	1.7	1.36	2.60	4	.09	---	.18
Cultivate	2-row	3.2	.66	.62	88	1.86	1.74	---
Cultivate, horses	1-row	2.5	1.34	2.64	12	.40	---	.79
Weed, rotary hoe	12-foot	1.6	.31	.29	32	.16	.15	---
Weed, rotary hoe, horses	12-foot	3.2	.46	.90	5	.07	---	.14
Spray	6-row	1.0	.55	.24	17	.09	.04	---
Total preharvest						10.31	6.19	4.83
Pick by machine	1-row	1.0	1.50	1.40	53	.80	.74	---
Pick by machine	2-row	1.0	.62	.58	12	.07	.07	---
Pick by machine, contract	1-row	1.0	1.43	1.04	16	.23	.17	---
Haul from picker	---	1.0	2.20	.63	81	1.78	.51	---
Bind	1-row	1.0	1.48	1.18	9	.13	.11	---
Cut by hand and shock	---	1.0	9.10	---	7	.64	---	---
Husk from shock and haul	---	1.0	9.04	2.53	9	.81	.23	---
Haul to shredder, horses	---	1.0	8.73	11.60	7	.61	---	.81
Shred	---	1.0	3.15	1.40	7	.22	.10	---
Pick by hand and haul	---	1.0	17.10	1.43	3	.51	.04	---
Total harvest						5.80	1.97	.81
Total						16.11	8.16	5.64

CORN FOR GRAIN (SURFACE-PLANTED): RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 41 farms in 1950 producing surface-planted corn in western Iowa, northeastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the central Missouri River Valley.

The farms surveyed averaged 198 total acres. In 1949, 169 acres were in crops, including 80 acres in corn. The average yield of corn was approximately 49 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed	Bu.	0.15	11.00	1.65	100	1.65
Sweet clover	Lb.	8	.30	2.40	27	.65
Red clover	Lb.	8	.65	5.20	6	.31
Manure	Ton	6	1/ 2.00	12.00	20	2.40
Mixed fertilizer	Cwt.	1.25	2.80	3.50	14	.49
Spray (DDT)	Gal.	2	2.00	4.00	3	.12
Spray (2,4-D)	Pint	1	.80	.80	7	.06
Total materials						5.68

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Spraying	Acre	1.0	1.35	1.35	4	.05
Picking	Acre	1.0	4.15	4.15	7	.29
Total contract work						.34

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, surface-planted, area V-A1, western Iowa, northeastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over Man	Time per acre once over Power	Acreage covered	Average time per acre - all farms Man	Average time per acre - all farms Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cover crop:							
Seed, endgate	---	1.0	0.24	0.21	33	0.08	0.07
Harrow, spiketooth	20-foot	1.2	.14	.13	22	.04	.03
Preharvest:							
Load manure-with loader	---	1.0	1.19	1.08	12	.14	.13
Apply manure, spreader	---	1.0	1.78	1.62	12	.21	.19
Apply manure-handload	---	1.0	4.00	2.00	8	.32	.16
Plow, moldboard	2-14 inch	1.0	1.23	1.18	28	.34	.33
Plow, moldboard	2-16 inch	1.0	1.05	1.00	39	.41	.39
Plow, moldboard	3-16 inch	1.0	.79	.76	17	.13	.13
Plow, moldboard	4-16 inch	1.0	.72	.68	10	.07	.07
Harrow, spiketooth	20-foot	2.7	.13	.12	100	.35	32
Disk, single	15-foot	1.8	.24	.23	83	.36	.34
Harrow, springtooth	10-foot	1.2	.33	.32	41	.16	.16
Plant	2-row	1.0	.52	.50	65	.34	.32
Plant	4-row	1.0	.29	.28	19	.06	.05
Plant, horses	2-row	1.0	.61	1.17	16	.10	---
Cultivate, first	2-row	1.0	.54	.52	93	.50	.48
Cultivate, other	2-row	2.3	.41	.40	94	.89	.86
Cultivate	4-row	2.4	.25	.24	7	.04	.04
Spray	---	1.0	.24	.21	6	.01	.01
Spray, contract	---	1.0	.24	.21	4	.01	.01
Hoe and weed	---	1.0	.48	---	50	.24	---
Total preharvest						4.80	4.09
Pick by machine	2-row	1.0	.77	.74	77	.59	.57
Pick by machine, contract	2-row	1.0	.77	.74	7	.05	.05
Pick by machine	1-row	1.0	1.15	1.10	16	.18	.18
Haul from 2-row picker	---	1.0	.67	.67	84	.56	.56
Haul from 1-row picker	---	1.0	1.00	.67	16	.16	.11
Total harvest						1.54	1.47
Total 1/						6.34	5.56

1/ In addition, horse work averaged 0.19 hour an acre.

CORN FOR GRAIN (LISTER PLANTED): RESOURCES USED IN PRODUCTION, AREA V-A1, 1948

The data presented here are taken from a survey made in 1949 by the Department of Agricultural Economics of the University of Nebraska of approximately 53 farms producing lister-planted corn in southeastern Nebraska. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri Valley.

In 1948, 89 acres of lister-planted corn were harvested per farm. The average yield was approximately 57 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1948

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed corn	Bu.	0.13	10.20	1.33	100	1.33
Fertilizer	---	1/	1/	1/	1/	.24
Spray	---	1/	1/	1/	1/	.17
Total materials						1.74

1/ Not available.

Man labor, power, and machinery used by operation in producing and harvesting lister-planted corn, area V-A1, southeastern Nebraska, 1948 1/

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure	---	1.0	0.99	0.90	5	0.05	0.04
Apply manure, spreader	70-bu.	1.0	2.20	2.00	5	.11	.10
Apply manure, hand load	60-bu.	1.0	3.85	2.08	8	.31	.17
Cut stalks	3-row	1.0	.33	.32	25	.08	.08
Disk, single	12-foot	2.2	.33	.32	82	.60	.58
Disk, tandem	8-foot	1.5	.56	.54	22	.18	.18
Plow, moldboard	2-14 inch	1.0	1.31	1.25	17	.22	.21
Plow, moldboard	2-16 inch	1.0	1.16	1.10	7	.08	.08
Plow, moldboard	3-14 inch	1.0	1.07	1.02	6	.06	.06
Harrow, spiketooth	15-foot	1.7	.23	.21	45	.18	.16
Plant, lister	2-row	1.0	.68	.63	100	.68	.63
Replant	2-row	1.0	.89	.81	4	.04	.03
Cultivate, kiriler	2-row	1.2	.62	.59	62	.46	.44
Cultivate, kiriler	4-row	1.2	.25	.24	10	.03	.03
Cultivate, other	2-row	2.1	.59	.56	91	1.13	1.07
Cut weeds	---	1.0	.54	---	46	.25	---
Spray	20-foot	1.0	.30	.28	8	.02	.02
Total preharvest						4.48	3.88
Pick by machine	2-row	1.0	.97	.92	60	.58	.55
Pick by machine	1-row	1.0	1.46	1.40	26	.38	.36
Haul from 2-row	---	1.0	1.36	.90	60	.82	.54
Haul from 1-row	---	1.0	1.32	1.15	26	.34	.30
Hand pick and haul, h.	---	1.0	5.70	11.00	14	.80	---
Total harvest						2.92	1.75
Total 2/						7.40	5.63

1/ Adapted from survey records obtained by the Department of Agricultural Economics of the University of Nebraska.

2/ In addition horse work averaged 1.54 hours an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-B1, 1947

The data presented here are based on a survey made in 1948 of approximately 71 farms producing corn for grain in central Iowa. These farms are located in type-of-farming area V-B1, a cash-corn, oats, and soybeans area in central Iowa.

The farms surveyed averaged 230 total acres per farm. In 1947, 218 acres were in crops, including 95 acres in corn. The average yield of corn was approximately 30 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 10 to 26; the most common was about 17.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed corn, hybrid	Bu.	0.15	1/ 9.20	1.38	100	1.38
Sweet clover seed 2/	Lb.	9	1/ .33	2.97	33	.98
Manure	Ton	5	3/ 2.00	10.00	11	1.10
Mixed fertilizer	Cwt.	1.45	2.20	3.19	23	.73
Total materials						4.19

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	3.80	3.80	20	.76
Shelling	Bu.	30	.02	.60	37	.22
Total contract work						.98

1/ Price paid by Iowa farmers April 1947.
2/ Approximately 33 percent of the farms in this area seed sweet clover to be plowed under in the spring.
3/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-B1, central Iowa, 1947

Operation	Size of equipment	Times over	Time per acre: once over: Man	Time per acre: once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	2.50	2.00	11	0.28	0.22
Disk stalks	10-foot	.8	.29	.28	7	.02	.02
Plow, moldboard	2-14 inch	1.0	1.26	1.21	49	.62	.59
Plow, moldboard	2-16 inch	1.0	1.17	1.11	35	.41	.39
Plow, moldboard	3-14 inch	1.0	.88	.84	10	.09	.08
Plow, moldboard	3-16 inch	1.0	.77	.74	6	.05	.04
Disk, tandem	9-foot	2.4	.30	.29	9	.06	.06
Disk, single	15-foot	2.1	.22	.21	87	.40	.38
Harrow, springtooth	11-foot	1.4	.25	.24	21	.07	.07
Harrow, spiketooth	20-foot	1.8	.14	.13	99	.25	.23
Plant	2-row	1.0	.53	.51	67	.36	.34
Plant	4-row	1.0	.33	.32	24	.08	.08
Plant, horses	2-row	1.0	.77	1.47	9	.07	---
Weed, rotary hoe	4-row	2.0	.23	.22	2	.01	.01
Cultivate	2-row	3.0	.47	.45	94	1.33	1.27
Cultivate	4-row	2.7	.29	.28	6	.05	.05
Total preharvest						4.15	3.83
Pick by machine	1-row	1.0	1.15	1.10	14	.16	.15
Pick by machine	2-row	1.0	.71	.68	66	.47	.45
Pick by machine, contract	2-row	1.0	.71	.68	20	.14	.13
Haul from 1-row picker	---	1.0	1.00	.50	14	.14	.07
Haul from 2-row picker	---	1.0	.93	.50	66	.61	.33
Shell	---	1.0	.56	.11	63	.35	.07
Shell, contract	---	1.0	.56	.11	37	.21	.04
Total harvest						2.08	1.24
Total 1/						6.23	5.07

1/ In addition, horse work averaged 0.13 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-B2, 1947

The data presented here are based on a survey made in 1948 of approximately 67 farms producing corn for grain in east central Illinois. These farms are located in type-of-farming area V-B2, a cash-corn, oats, and soybeans area in east central Illinois.

The farms surveyed averaged 226 total acres per farm. In 1947, 191 acres were in crops, including 94 in corn. The average yield of corn was approximately 45 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 9 to 36; the most common was about 19.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed corn, hybrid	Bu.	0.14	1/ 9.60	1.34	100	1.34
Sweet clover seed	Lb.	9	1/ .20	1.80	12	.22
Mixed fertilizer (3-12-12)	Cwt.	1.35	2.15	2.90	22	.64
Rock phosphate	Ton	.50	18.20	9.10	8	.73
Lime	Ton	2.5	3.10	7.75	8	.62
Total materials						3.55

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	4.00	4.00	16	.64
Shelling	Bu.	45	.02	.90	57	.51
Hauling	Bu.	45	.02	.90	16	.14
Total contract work						1.29

1/ Price paid by Illinois farmers, April 1947.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-B2, east central Illinois, 1947

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Disk stalks, tandem	8-foot	1.0	0.32	0.31	25	0.08	0.08
Disk stalks, single	11-foot	1.0	.23	.22	14	.03	.03
Plow, moldboard	2-14 inch	1.0	1.09	1.04	45	.49	.47
Plow, moldboard	2-16 inch	1.0	.96	.91	16	.15	.15
Plow, moldboard	3-14 inch	1.0	.81	.78	39	.32	.30
Disk, tandem	8-foot	2.0	.32	.31	50	.32	.31
Disk, single	12-foot	1.7	.22	.21	44	.16	.16
Harrow, springtooth	10-foot	1.2	.30	.29	13	.05	.05
Harrow, spiketooth	20-foot	1.5	.13	.12	74	.14	.13
Disk and harrow	9-foot	1.7	.28	.26	10	.05	.04
Roll	14-foot	1.0	.23	.22	3	.01	.01
Plant	2-row	1.0	.49	.47	48	.24	.23
Plant	4-row	1.0	.28	.26	39	.11	.10
Plant, horses	2-row	1.0	.68	1.30	13	.09	---
Harrow, spiketooth	20-foot	1.0	.14	.13	67	.10	.08
Weed, rotary hoe	4-row	1.1	.21	.20	31	.07	.07
Cultivate	2-row	2.7	.41	.40	93	1.03	1.00
Cultivate	4-row	2.6	.29	.28	6	.05	.04
Total preharvest						3.49	3.25
Pick by machine	1-row	1.0	1.29	1.23	12	.15	.15
Pick by machine	2-row	1.0	.76	.73	72	.55	.53
Pick, contract	2-row	1.0	.76	.73	16	.12	.12
Haul from 1-row picker	---	1.0	1.57	.56	12	.19	.07
Haul from 2-row picker	---	1.0	.66	.66	72	.48	.48
Haul from 2-row, contract	---	1.0	.66	.66	16	.10	.10
Shell	---	1.0	1.00	.13	17	.17	.02
Shell, contract	---	1.0	1.00	.13	57	.57	.08
Total harvest						2.33	1.55
Total 1/						5.82	4.80

1/ In addition, horse work averaged 0.17 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-D1, 1949

The data presented here are based on a survey of approximately 53 farms in 1950, in southern Michigan, northwestern Ohio and northeastern Indiana. These farms are in type-of-farming area V-D1, a livestock, dairy, soybean, and cash grain area on the northeastern fringe of the Corn Belt.

The farms surveyed averaged 168 total acres. In 1949, 130 acres were in crops, including 31 in corn for grain. The average yield of corn for grain was approximately 57 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P rating of these tractors ranged from 10 to 29; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.12	11.30	1.36	100	1.36
Clover seed 1/	Lb.	10	.24	2.40	9	.22
Manure	Ton	9	2/ 2.00	18.00	55	9.90
Mixed fertilizer	Cwt.	1.90	2.15	4.08	79	3.22
Total materials						14.70

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	4.40	4.40	18	.79
Total contract work						.79

1/ Clover was seeded with small grain the year before and plowed under in the spring.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-D1, southern Michigan, northwestern Ohio, and northeastern Indiana, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.30	1.50	55	1.82	0.82
Plow, moldboard	2-14 inch	1.0	1.25	1.20	100	1.25	1.20
Disk, tandem	7-foot	2.2	.41	.39	71	.64	.61
Harrow, springtooth	9-foot	1.8	.34	.32	64	.39	.37
Cultipack	9-foot	1.4	.32	.29	17	.08	.07
Disk and cultipack	7-foot	2.6	.44	.40	17	.19	.18
Harrow and cultipack	9-foot	1.5	.36	.33	10	.05	.05
Disk and harrow	7-foot	2.3	.48	.44	6	.07	.06
Plant	2-row	1.0	.56	.52	100	.56	.52
Harrow, spiketooth	9-foot	1.3	.26	.24	16	.05	.05
Weed	2-row	1.3	.29	.27	36	.14	.13
Cultipack	9-foot	1.0	.48	.44	11	.05	.05
Cultivate, first	2-row	1.0	.66	.62	100	.66	.62
Cultivate, other	2-row	2.1	.49	.46	100	1.03	.97
Total preharvest						6.98	5.70
Pick by machine	1-row	1.0	.82	.78	44	.36	.34
Pick by machine	2-row	1.0	1.38	1.30	38	.52	.49
Pick by machine, contract	1-row	1.0	.83	.76	18	.15	.14
Haul from picker	---	1.0	1.26	.55	100	1.26	.55
Total harvest						2.29	1.52
Total						9.27	7.22

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 42 farms producing corn for grain in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 322 total acres per farm. In 1949, 246 acres were in crops, including 60 acres in corn for grain. The average yield of corn was approximately 38 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed corn, purchased	Bu.	0.15	11.30	1.70	100	1.70
Sweet clover seed	Lb.	8	.25	2.00	3	.06
Manure	Ton	9	1/2.00	18.00	25	4.50
Mixed fertilizer	Cwt.	1.35	3.00	4.05	11	.45
Spray (2,4-D)	Pint	.8	.85	.68	6	.04
Spray, (DDT)	Acre	---	---	1.50	2	.03
Total materials						6.78

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	3.30	3.30	13	.43
Total contract work						.43

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure	----	1.0	1.87	1.63	15	0.28	0.24
Apply manure, spreader	----	1.0	.85	.81	15	.13	.12
Apply manure, hand load	----	1.0	4.60	2.50	10	.46	.25
Fertilize, spreader	11-foot	1.0	.53	.48	2	.01	.01
Plow, moldboard	2-14 inch	1.0	1.21	1.16	45	.54	.52
Plow, moldboard	3-14 inch	1.0	.89	.85	55	.49	.47
Disk, tandem	10-foot	1.6	.48	.46	17	.13	.13
Disk, single	15-foot	1.9	.32	.31	55	.33	.32
Field cultivate	9-foot	2.1	.52	.50	43	.47	.45
Cultipack	15-foot	1.6	.20	.19	8	.02	.02
Plant	2-row	1.0	.58	.55	48	.28	.26
Plant	4-row	1.0	.33	.32	29	.10	.09
Plant, horses	2-row	1.0	.72	1.39	23	.17	---
Cultivate, first	2-row	2.5	.61	.58	100	1.52	1.45
Cultivate, other	2-row	1.7	.44	.42	72	.54	.51
Hoe	----	1.0	.52	---	3	.02	---
Spray	30-foot	1.3	.15	.13	8	.02	.01
Total preharvest						5.51	4.85
Pick by machine	1-row	1.0	1.29	1.23	43	.55	.53
Pick by machine	2-row	1.0	.76	.73	44	.33	.32
Pick by machine, contract	2-row	1.0	.76	.73	13	.10	.10
Haul from 1-row	----	1.0	1.12	.56	43	.48	.24
Haul from 2-row	----	1.0	1.32	.66	57	.75	.38
Total harvest						2.21	1.57
Total 1/						7.72	6.42

1/ In addition, horse work averaged 0.32 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 63 corn-producing farms in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 214 total acres. In 1949, 138 acres were in crops, including 47 in corn. The average yield of corn for grain was 36 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 26; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Own seed corn	Bu.	0.11	5.20	0.57	12	0.07
Purchased seed corn	Bu.	.11	10.45	1.15	88	1.01
Manure	Ton	6.0	1/ 2.00	12.00	10	1.20
Mixed fertilizer (4-12-4)	Cwt.	1.20	2.20	2.64	49	1.29
Nitrate fertilizer	Cwt.	1.45	3.90	5.66	2	.11
Phosphate fertilizer	Cwt.	.95	3.20	3.04	7	.21
Spray (2,4-D)	Gal.	.1	7.00	.70	11	.08
Total materials						3.97

CONTRACT WORK HIRED

Picking	Acre	1.0	4.00	4.00	3	.12
Total contract work						.12

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-G1, western Missouri and eastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreaders	60-bu.	1.0	3.01	0.97	10	0.30	0.10	---
Plow, moldboard	2-14 inch	1.0	1.17	1.11	94	1.10	1.04	---
Disk, tandem	7-foot	1.8	.46	.44	55	.46	.44	---
Disk, single	10-foot	1.9	.40	.38	38	.29	.27	---
Harrow, spiketooth	12-foot	1.3	.26	.24	52	.18	.16	---
Plant	2-row	1.0	.49	.47	53	.26	.25	---
Plant, horses	2-row	1.0	1.05	2.00	28	.29	---	.56
List and plant	2-row	1.0	.68	.66	19	.13	.13	---
Harrow, spiketooth	16-foot	1.0	.20	.19	19	.04	.04	---
Cultivate, first	2-row	1.0	.86	.82	90	.77	.74	---
Cultivate, first, horses	1-row	1.0	2.04	3.88	10	.20	---	.39
Cultivate, other	2-row	2.2	.58	.55	87	1.11	1.05	---
Cultivate, other, horses	1-row	1.7	1.60	3.04	8	.22	---	.41
Spray	24-foot	1.2	.14	.12	11	.02	.02	---
Total preharvest						5.37	4.24	1.36
Pick by machine	2-row	1.0	.63	.60	23	.14	.14	---
Pick by machine	1-row	1.0	1.33	1.28	42	.56	.54	---
Pick by machine, contract	1-row	1.0	1.03	.94	3	.03	.02	---
Haul from picker	---	1.0	1.08	1.03	68	.73	.70	---
Pick by hand and haul, h.	---	1.0	6.44	10.47	32	2.06	---	3.35
Total harvest						3.52	1.40	3.35
Total						8.89	5.64	4.71

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-H1, 1950

The data presented here are based on a survey of approximately 45 farms in 1951 producing corn for grain in southern Iowa, northern Missouri and west central Illinois. These farms are in type-of-farming area V-H1, a livestock and pasture area.

The farms surveyed averaged 256 total acres. In 1950, 156 acres were in crops, including 44 acres in corn. The average yield of corn was approximately 58 bushels per acre.

Tractors provide most of the power used on these farms. They were used in the operations listed below unless otherwise indicated. The D.B.H.P rating of these tractors ranged from 7 to 28; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed corn	Bu.	0.14	8.85	1.24	100	1.24
Sweet clover seed 1/	Lb.	13	.16	2.08	17	.35
Manure	Ton	6	2/2.00	12.00	20	2.40
Fertilizer (4-12-8)	Cwt.	2.20	2.40	5.28	38	2.01
Superphosphate	Cwt.	2.05	1.80	3.69	3	.11
Limestone	Ton	2.5	3.60	9.00	7	.63
Spray (2,4-D)	Gal.	.1	10.00	1.00	3/ 1	.01
Spray (DDT)	Gal.	.5	2.00	1.00	3/17	.17
Total materials						6.92

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Spraying, airplane	Acre	1.0	2.50	2.50	10	.25
Picking	Acre	1.0	4.60	4.60	14	.64
Total contract work						.89

1/ Sweet clover was seeded with oats the previous year and plowed under for corn in the spring.

2/ Estimated.

3/ Does not include materials used in contract spraying.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-H1, southern Iowa, northern Missouri and west central Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, loader-sp.	90-bu.	1.0	2.10	2.10	4	0.08	0.08
Apply manure, spreader	75-bu.	1.0	3.00	1.50	13	.39	.20
Apply manure, horses-sp.	75-bu.	1.0	3.60	7.20	3	.11	---
Fertilize, spreader	8-foot	1.0	.68	.44	3	.02	.01
Cut stalks	2-row	1.0	.55	.52	6	.03	.03
Plow, moldboard	3-14 inch	1.0	.88	.84	36	.32	.30
Plow, moldboard	2-14 inch	1.0	1.26	1.22	64	.81	.78
Disk, tandem	7-foot	1.8	.47	.45	100	.85	.81
Roll	7-foot	1.0	.47	.43	8	.04	.03
Harrow, spiketooth	15-foot	2.5	.25	.24	79	.49	.47
Harrow, spiketooth, horses	12-foot	1.5	.65	1.95	3	.03	---
Plant	2-row	1.0	.75	.55	51	.38	.28
Plant, horses	2-row	1.0	.94	1.62	49	.46	---
Weed, rotary hoe	13-foot	1.4	.47	.43	24	.16	.14
Cultivate	2-row	2.9	.64	.59	100	1.86	1.71
Hoe and weed	---	1.0	3.00	---	12	.36	---
Spray	24-foot	1.2	.49	.31	8	.04	.03
Spray, airplane, contract	---	1.0	.30	---	10	.03	--
Total preharvest						6.46	4.87
Pick	1-row	1.0	1.04	.96	36	.37	.35
Pick, contract	1-row	1.0	1.04	.96	5	.05	.05
Pick	2-row	1.0	.70	.64	31	.22	.20
Pick, contract	2-row	1.0	.70	.64	9	.06	.06
Haul	---	1.0	1.35	.60	81	1.09	.49
Pick by hand and haul, h.	---	1.0	8.53	12.28	19	1.62	---
Total harvest						3.41	1.15
Total 1/						9.87	6.02

1/ In addition, horse work averaged 3.43 hours an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-H2, 1950

The data presented here are based on a survey made in 1951 of approximately 22 farms producing corn in northwestern Indiana and southwestern Michigan. These farms are in type-of-farming area V-H2, a livestock and pasture area.

The farms surveyed averaged 195 total acres. In 1950, 170 acres were in crops, including 37 in corn for grain. The average yield of corn was approximately 56 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 14 to 29; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.12	5.60	0.67	2	0.01
Purchased seed	Bu.	.12	11.20	1.34	98	1.31
Manure	Ton	14	1/2.00	28.00	35	9.80
Mixed fertilizer	Cwt.	1.15	1.90	2.18	75	1.64
Marl	Yd.	5.00	1.75	8.75	4	.35
Total materials						13.11

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Acre	1.0	4.15	4.15	35	1.45
Total contract work						1.45

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V-H2, northwestern Indiana and southwestern Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	85-bu.	1.0	3.84	1.74	35	1.34	0.61
Plow, moldboard	2-14 inch	1.0	1.22	1.17	100	1.22	1.17
Disk, tandem	8-foot	1.4	.42	.40	75	.44	.42
Harrow, springtooth	12-foot	2.1	.31	.29	56	.36	.34
Harrow, spiketooth	12-foot	1.9	.21	.20	52	.21	.20
Plant	2-row	1.0	.64	.56	55	.35	.31
Plant	4-row	1.0	.25	.24	45	.11	.11
Cultivate, first	2-row	1.0	.79	.76	100	.79	.76
Cultivate, other	2-row	2.3	.51	.46	100	1.17	1.06
Total preharvest						5.99	4.98
Pick, machine	1-row	1.0	1.33	1.27	40	.53	.51
Pick, machine	2-row	1.0	.77	.70	25	.19	.18
Pick, machine, contract	2-row	1.0	.79	.72	35	.28	.25
Haul and unload	---	1.0	1.85	.67	100	1.85	.67
Total harvest						2.85	1.61
Total						8.84	6.59

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VI-G2, 1950

The data presented here are based on a survey of approximately 32 farms in 1951 producing corn for grain in the Ozark Mountain and Border area of southeastern Missouri and southern Illinois. These farms are in type-of-farming area VI-G2, a dairy, livestock, and poultry area.

The farms surveyed averaged 207 total acres. In 1950, 98 acres were in crops, including 28 acres in corn for grain. The average yield of corn was approximately 51 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 16.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.11	9.40	1.03	100	1.03
Manure	Ton	7	1/ 2.00	14.00	15	2.10
Mixed fertilizer (4-12-4)	Cwt.	1.55	2.15	3.33	14	.47
Nitrate fertilizer	Cwt.	1.25	3.45	4.31	5	.22
Lime	Ton	2.2	2.90	6.38	10	.64
Spray	Gal.	.08	5.30	.42	2/ 28	.12
Total materials						4.58

CONTRACT WORK HIRED

Spraying	Acre	1.0	2.60	2.60	9	.23
Picking	Acre	1.0	4.20	4.20	12	.50
Shredding	Acre	1.0	10.00	10.00	3	.30
Total contract work						1.03

1/ Estimated.

2/ Does not include materials used in contract spraying.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area VI-G2, southeastern Missouri and southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre: once over: Man	Time per acre: once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.35	1.68	5	0.17	0.08	---
Apply manure, horses-sp.	75-bu.	1.0	4.02	8.04	10	.40	---	0.80
Fertilize, spreader	8-foot	1.0	.68	.44	5	.03	.02	---
Plow, moldboard	3-14 inch	1.0	.80	.77	15	.12	.12	----
Plow, moldboard	2-14 inch	1.0	1.31	1.26	77	1.01	.97	---
Plow, moldboard, horses	1-16 inch	1.0	3.94	11.81	8	.32	---	.94
Disk, tandem	7-foot	1.8	.47	.45	90	.76	.73	---
Disk, tandem, horses	7-foot	2.0	2.63	5.25	5	.26	---	.53
Harrow, spiketooth	15-foot	1.7	.25	.24	44	.19	.18	---
Harrow, spiketooth, h.	10-foot	1.2	.93	1.87	8	.09	---	.18
Plant	2-row	1.0	.60	.50	50	.30	.25	---
Plant, horses	2-row	1.0	.89	1.58	50	.44	---	.79
Cultivate	2-row	2.8	.63	.58	80	1.41	1.30	---
Cultivate, horses	1-row	2.8	1.71	3.21	20	.96	---	1.83
Hoe and weed by hand	---	1.0	3.00	---	8	.24	---	---
Spray	6-row	1.0	.49	.31	28	.14	.09	---
Spray, contract	6-row	1.0	.49	.31	9	.04	.03	---
Total preharvest						6.88	3.77	5.07
Pick by machine	1-row	1.0	1.16	1.07	20	.23	.21	---
Pick by machine	2-row	1.0	.78	.72	44	.34	.32	---
Pick by machine, contract	2-row	1.0	.78	.72	12	.09	.09	---
Haul from picker	---	1.0	1.35	.60	64	.86	.30	---
Pick by hand and haul	---	1.0	8.53	12.29	31	2.64	---	3.81
Cut and shock	---	1.0	7.30	---	5	.36	---	---
Haul to shredder	---	1.0	6.25	6.25	3	.19	---	.19
Shred, contract	---	1.0	3.00	1.38	3	.09	.04	---
Husk from shock	---	1.0	18.90	---	2	.38	---	---
Haul from shock	---	1.0	3.10	4.50	2	.06	---	.09
Total harvest						5.24	.96	4.09
Total						12.12	4.73	9.16

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VI-G3, 1950

The data presented here are based on a survey of approximately 31 farms in 1951 producing corn for grain in the gray lands of southern Illinois. These farms are in type-of-farming area VI-G3, a dairy, livestock, and poultry area.

The farms surveyed averaged 186 total acres. In 1950, 150 acres were in crops, including 48 acres of corn. The average yield was approximately 42 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.11	10.55	1.16	100	1.16
Sweet clover seed 1/	Lb.	11	.21	2.31	24	.55
Manure	Ton	6	2/ 2.00	12.00	5	.60
Mixed fertilizer(3-12-12)	Cwt.	1.50	2.25	3.38	83	2.81
Lime	Ton	3.0	3.25	10.08	6	.60
Total materials						5.72

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking	Bu.	42	.13	5.46	6	.33
Hauling	Bu.	42	.09	3.78	9	.34
Total contract work						.67

1/ Sweet clover seed planted the previous year and plowed under in the spring.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area V1-G3, southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, horses - sp.	75-bu.	1.0	3.43	6.85	5	0.17	---	0.34
Fertilize, horses	75-bu.	1.0	.89	1.20	4	.04	---	.05
Plow, moldboard	3-14 inch	1.0	.81	.78	32	.26	0.25	---
Plow, moldboard	2-14 inch	1.0	1.20	1.15	68	.82	.78	---
Disk, tandem	7-foot	2.1	.44	.42	90	.83	.79	---
Disk, single	6-foot	2.6	.38	.37	6	.06	.06	---
Harrow, spiketooth	15-foot	1.7	.23	.22	89	.35	.33	---
Disk and harrow	7-foot	1.4	.47	.45	13	.09	.08	---
Plant	2-row	1.0	.86	.60	67	.58	.40	---
Plant, horses	2-row	1.0	1.00	1.70	33	.33	---	.56
Harrow, spiketooth	10-foot	1.1	.36	.35	12	.05	.05	---
Cultivate	2-row	2.7	.64	.59	91	1.57	1.45	---
Cultivate, horses	1-row	3.0	1.65	3.15	9	.45	---	.85
Weed, rotary hoe	9-foot	1.3	.47	.43	44	.27	.25	---
Hoe by hand	---	1.0	3.00	---	8	.24	---	---
Total preharvest						6.11	4.44	1.80
Pick by machine	2-row	1.0	.70	.64	24	.17	.15	---
Pick by machine, contract	2-row	1.0	.70	.64	6	.04	.04	---
Pick by machine	1-row	1.0	1.04	.96	43	.45	.41	---
Pick by hand and haul	---	1.0	8.53	12.28	27	2.30	---	3.32
Haul from picker	---	1.0	1.35	.60	55	.74	.33	---
Haul from picker, truck	1½-ton	1.0	1.35	.60	9	.12	---	---
Haul, truck, contract	1½-ton	1.0	1.35	.60	9	.12	---	---
Total harvest						3.94	.93	3.32
Total 1/						10.05	5.37	5.12

1/ In addition truck use averaged 0.11 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey of approximately 45 corn-producing farms in 1950, in southeastern Ohio. These farms are located in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley.

The farms surveyed averaged 149 total acres. In 1949, 93 acres were in crops, including 25 in corn for grain. The average yield of corn was 49 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 27; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.16	9.40	1.50	100	1.50
Manure	Ton	9	1/ 2.00	18.00	39	7.02
Mixed fertilizer	Cwt.	2.05	2.25	4.61	98	4.52
Limestone	Ton	1.7	3.80	6.46	13	.84
Spray (2,4-D)	Pt.	.8	.95	.76	13	.10
Twine	Lb.	2	.25	.50	12	.06
Total materials						14.04

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Spraying	Acre	1.0	1.35	1.35	6	.08
Picking	Acre	1.0	5.30	5.30	11	.58
Total contract work						.66

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	6.28	2.37	37	2.32	0.88	---
Apply manure, horses-sp.	65-bu.	1.0	13.75	23.72	2	.28	---	.47
Spread lime, truck	---	1.0	.62	.44	2	.01	---	---
Plow, moldboard	2-14 inch	1.0	1.50	1.43	76	1.14	1.09	---
Plow, moldboard	2-12 inch	1.0	1.80	1.72	20	.36	.34	---
Plow, moldboard, horses	1-12 inch	1.0	9.57	19.14	4	.38	---	.77
Disk, tandem	10-foot	1.5	.39	.37	7	.04	.04	---
Disk, tandem	7-foot	2.3	.51	.48	76	.89	.84	---
Disk, single, horses	6-foot	2.0	1.46	2.93	2	.06	---	.12
Harrow, springtooth	11-foot	1.2	.45	.40	24	.13	.12	---
Harrow, spiketooth, h.	7-foot	1.8	1.15	2.20	2	.04	---	.08
Disk and harrow	7-foot	1.8	.45	.43	27	.22	.21	---
Cultipack	10-foot	1.2	.55	.50	20	.13	.12	---
Plant	2-row	1.0	.94	.87	70	.66	.61	---
Plant, horses	2-row	1.0	1.40	2.50	30	.42	---	.75
Harrow, spiketooth	8-foot	1.3	.38	.35	24	.12	.11	---
Harrow, spiketooth, h.	7-foot	1.0	1.01	1.94	3	.03	---	.06
Weed by hand	---	1.0	17.14	---	2	.34	---	---
Weed, rotary hoe	---	1.3	.40	.38	20	.10	.10	---
Cultivate	2-row	3.0	.59	.56	92	1.63	1.55	---
Cultivate, horses	1-row	2.8	2.04	3.80	8	.46	---	.85
Spray	8-row	1.0	.40	.35	7	.03	.02	---
Spray, contract	8-row	1.0	.29	.25	6	.02	.02	---
Total preharvest						9.81	6.05	3.10
Pick by machine	1-row	1.0	1.43	1.03	67	.96	.69	---
Pick by machine, contract	1-row	1.0	1.17	1.00	11	.13	.11	---
Haul from picker	---	1.0	2.10	.60	78	1.64	.47	--
Bind	1-row	1.0	1.70	1.24	5	.08	.06	---
Shock by hand	---	1.0	3.10	---	5	.16	---	---
Cut by hand and shock	---	1.0	3.61	---	7	.25	---	---
Husk from shock	---	1.0	10.47	---	10	1.05	---	---
Haul from shock	---	1.0	6.29	2.00	5	.31	.10	---
Haul from shock, horses	---	1.0	2.69	5.12	5	.13	---	.26
Haul to shredder	---	1.0	5.25	1.20	2	.10	.02	---
Shred	---	1.0	1.20	.55	2	.02	.01	---
Pick by hand	---	1.0	10.00	---	10	1.00	---	---
Haul from field	---	1.0	3.10	.98	2	.06	.02	---
Haul from field, horses	---	1.0	2.31	3.38	8	.18	---	.27
Total harvest						6.07	1.48	.53
Total 1/						15.88	7.53	3.63

1/ In addition truck use averaged 0.01 hour an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 21 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck and mixed farming area on the eastern shore of Lake Michigan.

The farms surveyed averaged 223 total acres. In 1950, 144 acres were in crops, including 14 in corn for silage. The average yield of corn silage was approximately 7 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	0.14	5.30	0.74	36	0.27
Purchased seed	Bu.	.14	10.60	1.48	64	.95
Manure	Ton	5	[1] 2.00	10.00	66	6.60
Mixed fertilizer	Cwt.	1.75	2.35	4.11	96	3.95
Twine	Lb.	3.7	.25	.92	96	.88
Total materials						12.65

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Binding	Acre	1.0	4.00	4.00	8	.32
Total contract work						.32

[1] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for silage, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75 bu.	1.0	0.70	0.32	66	0.46	0.21
Plow, moldboard	1-16 inch	1.0	1.77	1.69	2	.04	.03
Plow, moldboard	2-14 inch	1.0	1.33	1.27	92	1.22	1.17
Plow, moldboard	3-14 inch	1.0	.88	.84	6	.05	.05
Disk, tandem	7-foot	2.8	.46	.44	16	.21	.20
Harrow, spiketooth	8-foot	1.6	.32	.30	17	.09	.08
Harrow, springtooth	12-foot	1.8	.33	.32	96	.57	.56
Plant	2-row	1.0	.78	.75	100	.78	.75
Weed	12-foot	1.7	.15	.15	15	.04	.04
Cultivate, first	2-row	1.0	.99	.94	100	.99	.94
Cultivate, other	2-row	3.1	.55	.50	100	1.70	1.55
Total preharvest						6.15	5.58
Bind	1-row	1.0	1.69	.90	83	1.40	.75
Bind	2-row	1.0	.82	.75	5	.04	.04
Bind, contract	---	1.0	1.91	1.17	8	.15	.09
Haul to silo	---	1.0	3.97	.65	96	3.81	.62
Chop and blow	---	1.0	.96	.52	96	.92	.50
Field chop	---	1.0	1.15	1.05	4	.05	.04
Haul to silo	---	1.0	2.20	.60	4	.09	.02
Blow into silo	---	1.0	2.20	.75	4	.09	.03
Total harvest						6.55	2.09
Total						12.70	7.67

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 175 total acres. In 1950, 134 acres were in crops, including 16 in corn for silage. The average yield of corn silage was approximately 10 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 34; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.16	10.25	1.64	100	1.64
Mixed fertilizer	Cwt.	1.50	2.30	3.45	85	2.93
Manure	Ton	17	1/ 2.00	34.00	75	25.50
Twine	Lb.	4.0	.25	1.00	36	.36
Total materials						30.43

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chop	Acre	1.0	11.35	11.35	21	2.38
Blow in silo	Acre	1.0	1.00	1.00	4	.04
Total contract work						2.42

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn silage, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	6.63	3.02	61	4.04	1.84
Apply manure, horses, sp.	75-bu.	1.0	11.88	14.58	14	1.66	---
Plow, moldboard	2-14 inch	1.0	1.40	1.33	62	.87	.82
Plow, moldboard	3-14 inch	1.0	.77	.74	38	.29	.28
Disk, tandem	8-foot	2.0	.50	.47	72	.72	.68
Disk and harrow	8-foot	2.0	.48	.46	14	.13	.13
Harrow, springtooth	12-foot	1.6	.31	.29	43	.22	.20
Harrow, spiketooth	15-foot	1.5	.16	.16	63	.15	.15
Field cultivate	10-foot	2.2	.33	.32	19	.14	.13
Cultipack	10-foot	1.0	.48	.46	7	.03	.03
Plant	2-row	1.0	.55	.52	69	.38	.36
Plant, horses	2-row	1.0	.82	1.65	31	.25	---
Cultivate, first	2-row	1.0	1.00	.91	98	.98	.89
Cultivate, other	2-row	2.7	.52	.47	90	1.26	1.14
Cultivate, other	4-row	4.0	.37	.34	8	.12	.11
Total preharvest						11.24	6.76
Bind	1-row	1.0	1.72	1.58	36	.62	.57
Shock by hand	---	1.0	2.20	---	3	.07	---
Haul to silo	---	1.0	4.28	2.80	17	.73	.48
Haul to silo, horses	---	1.0	3.01	3.22	16	.48	---
Chop and blow	---	1.0	2.25	2.25	33	.74	.74
Field chop	---	1.0	1.53	1.40	43	.66	.60
Field chop, contract	---	1.0	1.33	1.22	21	.28	.26
Haul to silo	---	1.0	1.96	1.02	64	1.25	.65
Blow into silo	---	1.0	1.02	1.02	60	.61	.61
Blow into silo, contract	---	1.0	.75	.75	4	.03	.03
Haul to shredder	---	1.0	2.79	4.06	3	.08	.12
Shred	---	1.0	2.20	1.33	3	.07	.04
Total harvest						5.62	4.10
Total 1/						16.86	10.86

1/ In addition horse work averaged 3.07 hours an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 28 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy-and livestock area.

The farms surveyed averaged 230 total acres. In 1950, 165 acres were in crops, including 15 in corn silage. The average yield of corn silage was approximately 12 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 27; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.15	6.00	0.90	6	0.05
Purchased seed	Bu.	.15	11.95	1.79	94	1.68
Manure	Ton	16	1/ 2.00	32.00	70	22.40
Mixed fertilizer	Cwt.	1.60	2.65	4.24	67	2.84
Twine	Lb.	4.5	.25	1.12	31	.35
Total materials						27.32

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chop	Acre	1.0	8.20	8.20	14	1.15
Total contract work						1.15

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for silage, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	3.61	1.64	65	2.35	1.07
Apply manure, horses -sp.	75-bu.	1.0	11.00	12.00	5	.55	---
Plow, moldboard	2-14 inch	1.0	1.28	1.22	53	.68	.65
Plow, moldboard	3-14 inch	1.0	.94	.89	47	.44	.42
Disk, tandem	8-foot	1.9	.41	.39	45	.35	.33
Disk, single	15-foot	1.7	.30	.28	39	.20	.19
Harrow, springtooth	12-foot	2.0	.35	.34	35	.24	.24
Harrow, spiketooth	20-foot	1.9	.14	.14	62	.16	.16
Fertilize	8-foot	1.0	1.15	1.10	5	.06	.06
Plant	2-row	1.0	.63	.60	82	.52	.49
Plant, horses	2-row	1.0	.72	1.46	18	.13	---
Blind cultivate	2-row	1.0	1.10	1.05	5	.06	.05
Cultivate, first	2-row	1.0	.91	.87	100	.91	.87
Cultivate, other	2-row	2.8	.51	.46	100	1.43	1.29
Total harvest						8.08	5.82
Bind	1-row	1.0	1.58	1.20	31	.49	.37
Haul to silo	---	1.0	5.57	1.69	31	1.73	.52
Chop and blow	---	1.0	1.20	1.20	31	.37	.37
Field chop	1-row	1.0	1.20	1.09	55	.66	.60
Field chop, contract	1-row	1.0	1.20	1.09	14	.17	.15
Haul to silo	---	1.0	2.80	.90	69	1.93	.62
Blow into silo	---	1.0	.80	.80	69	.55	.55
Total harvest						5.90	3.18
Total 1/						13.98	9.00

1/ In addition horse work averaged 0.86 hour an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 28 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy and cash crop area.

The farms surveyed averaged 172 total acres. In 1949, 123 acres were in crops, including 8 in corn harvested for silage. The average yield of corn silage was 10 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.16	6.20	0.99	4	0.04
Purchased seed corn	Bu.	.16	9.40	1.50	96	1.44
Sweet clover seed 1/	Lb.	11	.21	2.31	18	.42
Manure	Ton	11	2/2.00	22.00	63	13.86
Fertilizer (2-12-6)	Cwt.	1.80	2.15	3.87	97	3.75
Spray (2,4-D)	Gal.	.1	7.45	.74	13	.10
Twine	Lb.	2/3.5	2/ .25	.87	57	.50
Total materials						20.11

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chopping 3/	Acre	1.0	12.90	12.90	20	2.58
Stationary filling	Acre	1.0	6.00	6.00	4	.24
Total contract work						2.82

1/ Sweet clover seed was seeded with oats the year before and plowed under in the spring.

2/ Estimated.

3/ Custom operator usually furnishes the chopper, blower, 1 tractor and 2 wagons.

Man labor, power, and machinery used by operation in producing and harvesting corn silage, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.76	1.32	63	2.37	0.83
Plow, moldboard	2-14 inch	1.0	1.39	1.27	100	1.39	1.27
Disk, tandem	8-foot	1.9	.46	.44	60	.52	.50
Harrow, springtooth	9-foot	2.9	.39	.36	75	.85	.78
Cultipack	9-foot	1.3	.44	.40	28	.16	.15
Harrow and cultipack	9-foot	2.4	.46	.42	27	.30	.27
Disk and cultipack	8-foot	2.8	.41	.38	6	.07	.06
Fertilize, drill	7-foot	1.0	.77	.70	2	.02	.01
Plant	2-row	1.0	.73	.62	100	.73	.62
Harrow, spiketooth	9-foot	1.5	.36	.32	2	.01	.01
Weed	12-foot	1.6	.32	.29	19	.10	.09
Weed, rotary hoe	2-row	1.5	.40	.37	8	.05	.04
Cultivate, first	2-row	1.0	.93	.87	100	.93	.87
Cultivate, other	2-row	2.3	.60	.57	100	1.38	1.31
Weed by hand	---	1.0	2.18	---	9	.20	---
Spray	---	1.0	2.25	1.98	13	.29	.26
Total preharvest						9.37	7.07
Field chop	---	1.0	1.70	1.10	23	.39	.25
Field chop, contract	---	1.0	1.70	1.10	20	.34	.22
Haul to silo	---	1.0	3.40	2.20	43	1.46	.95
Blow into silo	---	1.0	1.70	1.10	23	.39	.25
Blow into silo, contract	---	1.0	1.70	1.10	20	.34	.22
Bind	1-row	1.0	1.33	1.22	57	.76	.70
Haul to silo	---	1.0	12.84	4.47	57	7.32	2.55
Chop and blow	---	1.0	1.86	1.57	53	.99	.83
Chop and blow, contract	---	1.0	1.86	1.57	4	.07	.06
Total harvest						12.06	6.03
Total						21.43	13.10

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey made in 1951 of approximately 34 farms producing corn silage in central Wisconsin. These farms are in type-of-farming area IV-F1, a dairy-and general-farming area.

The farms surveyed averaged 123 total acres per farm. In 1950, approximately 95 acres were in crops, including 15 in corn silage. The average yield of corn silage was approximately 11 tons per acre.

Tractors provide most of the power used on farms in this area. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 8 to 31; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.17	10.80	1.84	100	1.84
Manure	Ton	18	1/2.00	36.00	79	28.44
Fertilizer (3-12-12)	Cwt.	1.40	3.35	4.69	61	2.86
Mixed fertilizer	Cwt.	1.25	2.35	2.94	26	.76
Limestone	Ton	.8	1.90	1.52	6	.09
Twine	Lb.	4.0	.26	1.04	37	.38
Total materials						34.37

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chopping	Acre	1.0	7.35	7.35	28	2.06
Total contract work						2.06

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for silage, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	2.82	1.74	64	1.80	1.11
Apply manure, horses-sp.	75-bu.	1.0	8.59	9.37	15	1.29	———
Plow, moldboard	2-14 inch	1.0	1.34	1.28	100	1.34	1.28
Disk, tandem	8-foot	2.0	.44	.42	72	.63	.60
Quackdig	8-foot	5.3	.37	.36	11	.22	.21
Field, cultivate	7-foot	4.0	.75	.71	15	.45	.43
Harrow, springtooth	12-foot	2.4	.34	.32	41	.34	.32
Harrow, spiketooth	15-foot	1.4	.21	.20	25	.07	.07
Plant	2-row	1.0	.71	.68	54	.38	.37
Plant, horses	2-row	1.0	1.00	1.95	46	.46	————
Harrow, spiketooth	16-foot	1.2	.25	.24	62	.19	.18
Cultivate, first	2-row	1.0	1.06	1.01	100	1.06	1.01
Cultivate, other	2-row	3.2	.57	.55	100	1.82	1.76
Total preharvest						10.05	7.34
Bind	1-row	1.0	1.18	1.08	37	.44	.40
Haul to silo	———	1.0	2.34	1.14	37	.87	.42
Chop and blow	———	1.0	2.09	1.60	37	.77	.59
Field chop	1-row	1.0	1.87	1.71	35	.65	.60
Field chop, contract	1-row	1.0	1.14	1.04	28	.32	.29
Haul to silo	———	1.0	1.32	.55	63	.83	.35
Blow into silo	———	1.0	.99	.82	63	.62	.52
Total harvest						4.50	3.17
Total 1/						14.55	10.51

1/ In addition, horse work averaged 2.30 hours an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 35 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy-and general-farming area on the Lake Erie border.

The farms surveyed averaged 182 total acres. In 1949, 110 acres were in crops, including 12 acres of corn harvested for silage. The average yield of corn silage was 11 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.22	8.45	1.86	100	1.86
Manure	Ton	10	1/2.00	20.00	74	14.80
Mixed fertilizer	Cwt.	3.20	2.25	7.20	100	7.20
Lime	Ton	1.6	3.85	6.16	10	.62
Twine	Lb.	4.0	.25	1.00	48	.48
Total materials						24.96

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chopping and filling	Acre	1.0	15.50	15.50	11	1.70
Binding	Acre	1.0	5.20	5.20	4	.21
Total contract work						1.91

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn silage, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre: once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	5.19	2.14	68	3.52	1.46	---
Apply manure, h. & sled	---	1.0	19.06	13.33	6	1.14	---	0.80
Plow, moldboard	3-14 inch	1.0	1.10	1.05	21	.23	.22	---
Plow, moldboard	2-14 inch	1.0	1.48	1.42	68	1.01	.97	---
Plow, moldboard	2-12 inch	1.0	2.43	2.32	11	.27	.26	---
Disk, tandem	8-foot	2.2	.45	.43	93	.92	.88	---
Disk, tandem	6-foot	2.7	.74	.70	3	.06	.06	---
Harrow, spiketooth	11-foot	1.7	.40	.37	66	.45	.42	---
Plant	2-row	1.0	1.02	.68	89	.91	.61	---
Plant, horses	2-row	1.0	1.03	2.02	11	.11	---	.22
Cultivate	2-row	3.2	.62	.58	94	1.86	1.75	---
Cultivate, horses	1-row	3.0	1.55	3.62	6	.28	---	.65
Cultipack	8-foot	1.0	.38	.35	17	.06	.06	---
Weed	12-foot	1.7	.27	.25	24	.11	.10	---
Weed, horses	12-foot	3.0	.44	.88	7	.09	---	.18
Total preharvest						11.02	6.79	1.85
Field chop	---	1.0	1.44	1.22	41	.59	.50	---
Field chop, contract 1/	---	1.0	6.07	1.25	11	.67	.14	---
Haul to silo	---	1.0	3.00	.87	41	1.23	.36	---
Blow into silo	---	1.0	1.82	1.14	41	.75	.47	---
Bind	1-row	1.0	1.54	1.34	42	.65	.56	---
Bind, horses	1-row	1.0	3.00	5.50	2	.06	---	.11
Bind, contract	1-row	1.0	1.54	1.34	4	.06	.05	---
Haul to silo	---	1.0	8.00	1.64	39	3.12	.64	---
Haul to silo, horses	---	1.0	7.38	7.40	9	.66	---	.67
Chop and blow	---	1.0	4.43	2.33	48	2.13	1.12	---
Total harvest						9.92	3.84	.78
Total						20.94	10.63	2.63

1/ Includes hauling to silo and filling.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA V-D1, 1949

The data presented here are based on a survey of approximately 33 farms in 1950, in southern Michigan, northwestern Ohio, and northeastern Indiana. These farms are in type-of-farming area V-D1, a livestock, dairy, soybean and cash grain area on the northeastern fringe of the Corn Belt.

The farms surveyed averaged 191 total acres. In 1949, 142 acres were in crops, including 4 in corn for silage. The average yield of corn silage was 9 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.14	10.70	1.50	100	1.50
Clover seed	Lb.	10	.24	2.40	11	.26
Manure	Ton	9	1/2.00	18.00	55	9.90
Mixed fertilizer	Cwt.	1.90	2.15	4.08	79	3.22
Twine	Lb.	1/ 3.5	1/ .25	.87	40	.35
Total materials						15.23

CONTRACT WORK HIRED

Field chopping 2/	Acre	1.0	11.20	11.20	36	4.03
Stationary filling	do.	1.0	3.60	3.60	6	.22
Total contract work						4.25

1/ Estimated.

2/ Contract operator usually furnishes the chopper, blower, 1 tractor and 2 wagons.

Man labor, power, and machinery used by operation in producing and harvesting corn silage, area V-D1, southern Michigan, northwestern Ohio, and northeastern Indiana, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cover crop:							
Seed cover crop, drill	8-foot	1.0	0.37	0.34	8	0.03	0.03
Seed cover crop by hand	---	1.0	.38	---	3	.01	---
Preharvest:							
Apply manure, spreader	---	1.0	3.30	1.50	55	1.82	.82
Plow, moldboard	2-14 inch	1.0	1.25	1.20	100	1.25	1.20
Disk, tandem	7-foot	2.2	.41	.39	71	.64	.61
Harrow, springtooth	9-foot	1.8	.34	.32	64	.39	.37
Cultipack	9-foot	1.4	.32	.29	17	.08	.07
Disk and cultipack	7-foot	2.6	.44	.40	17	.19	.18
Harrow and cultipack	9-foot	1.5	.36	.33	10	.05	.05
Disk and harrow	7-foot	2.3	.48	.44	6	.07	.06
Plant	2-row	1.0	.56	.52	100	.56	.52
Harrow, spiketooth	9-foot	1.3	.26	.24	16	.05	.05
Weed, rotary hoe	2-row	1.3	.29	.27	36	.14	.13
Cultipack	9-foot	1.0	.48	.44	11	.05	.05
Cultivate, first	2-row	1.0	.66	.62	100	.66	.62
Cultivate, other	2-row	2.1	.49	.46	100	1.03	.96
Total preharvest						7.02	5.72
Field chop	---	1.0	1.69	.99	24	.41	.24
Field chop, contract	---	1.0	1.69	.99	36	.61	.36
Haul to silo	---	1.0	3.38	1.98	60	2.03	1.19
Blow into silo	---	1.0	1.69	.99	24	.40	.24
Blow into silo, contract	---	1.0	1.69	.99	36	.61	.36
Bind	1-row	1.0	1.27	1.17	40	.51	.47
Haul to silo	---	1.0	8.32	4.07	40	3.33	1.63
Chop and blow	---	1.0	1.30	1.25	34	.44	.42
Chop and blow, contract	---	1.0	1.30	1.16	6	.08	.07
Total harvest						8.42	4.98
Total						15.44	10.70

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 40 farms producing corn for silage in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 267 total acres per farm. In 1949, 203 acres were in crops, including 12 in corn for silage. The average yield of corn silage was approximately 8 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	Bu.	0.19	10.05	1.91	100	1.91
Sweet clover seed 1/	Lb.	11	.25	2.75	4	.11
Manure	Ton	10	2/2.00	20.00	28	5.60
Mixed fertilizer	Cwt.	1.00	3.20	3.20	4	.13
Twine	Lb.	3.6	.23	.81	63	.51
Total materials						8.26

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Field chopping	Acre	1.0	8.90	8.90	27	2.40
Binding	Acre	1.0	2.85	2.85	11	.31
Chopping and blowing	Acre	1.0	2.45	2.45	16	.39
Total contract work						3.10

1/ Sweet clover planted the previous year and plowed under in the spring.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for silage, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	4.23	1.92	28	1.18	0.54
Plow, moldboard	2-14 inch	1.0	1.23	1.18	24	.30	.28
Plow, moldboard	2-16 inch	1.0	1.17	1.11	37	.43	.41
Plow, moldboard	3-14 inch	1.0	.89	.85	27	.24	.23
Plow, moldboard	3-16 inch	1.0	.78	.75	12	.09	.09
Field cultivate	9-foot	2.1	.52	.50	45	.49	.47
Disk, tandem	9-foot	1.5	.46	.44	11	.08	.07
Disk, single	15-foot	1.4	.32	.31	64	.29	.28
Harrow, spiketooth	24-foot	1.9	.13	.12	100	.25	.23
Cultipack	17-foot	1.0	.21	.20	9	.02	.02
Plant	2-row	1.0	.61	.58	67	.41	.39
Plant	4-row	1.0	.32	.31	14	.04	.04
Plant, horses	2-row	1.0	.78	1.50	19	.15	---
Harrow, spiketooth	24-foot	1.5	.13	.12	100	.20	.18
Cultivate, first	2-row	2.4	.60	.57	100	1.44	1.37
Cultivate, other	2-row	1.7	.40	.38	61	.41	.39
Total preharvest						6.02	4.99
Field chop	---	1.0	1.08	.99	10	.11	.10
Field chop, contract	---	1.0	1.08	.99	27	.29	.27
Haul	---	1.0	2.92	2.43	24	.70	.58
Haul, truck	---	1.0	2.16	1.80	13	.28	---
Blow into silo	---	1.0	2.62	.99	37	.97	.37
Bind	1-row	1.0	1.02	.94	42	.43	.40
Bind	2-row	1.0	.67	.62	8	.05	.05
Bind, horses	1-row	1.0	2.40	6.60	2	.05	---
Bind, contract	1-row	1.0	1.02	.94	11	.11	.10
Haul to chopper	---	1.0	4.12	3.26	49	2.02	1.60
Haul to chopper, horses	---	1.0	5.15	8.58	14	.72	---
Chop and blow	---	1.0	2.62	.94	47	1.23	.44
Chop and blow, contract	---	1.0	2.62	.94	16	.42	.15
Total harvest						7.38	4.06
Total 1/						13.40	9.05

1/ In addition horse work averaged 1.61 hours an acre and truck use 0.12 hour an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA V-H2, 1950

The data presented here are based on a survey made in 1951 of approximately 17 farms in northwestern Indiana and southwestern Michigan. These farms are in type-of-farming area V-H2, a livestock and pasture area.

The farms surveyed averaged 237 total acres. In 1950, 215 acres were in crops, including 12 in corn for silage. The average yield of corn silage was approximately 9 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 11 to 39; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.14	5.80	0.81	15	0.12
Purchased seed	Bu.	.14	11.60	1.62	85	1.38
Rye seed	Bu.	1.0	1.75	1.75	25	.44
Manure	Ton	16	1/ 2.00	32.00	36	11.52
Mixed fertilizer	Cwt.	1.15	2.25	2.59	88	2.28
Twine	Lb.	3.0	.23	.69	6	.04
Total materials						15.78

CONTRACT WORK HIRED

Field chopping and blowing	Acre	1.0	9.65	9.65	7	.68
Total contract work						.68

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for silage, area V-H2, northwestern Indiana and southwestern Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cover crop:							
Disk	8-foot	1.0	0.38	0.37	25	0.10	0.09
Drill	---	1.0	.25	.24	25	.06	.06
Preharvest:							
Apply manure, spreader	85-bu.	1.0	4.27	1.94	36	1.54	.70
Plow, moldboard	2-14 inch	1.0	1.17	1.11	100	1.17	1.11
Disk, tandem	8-foot	1.4	.41	.39	33	.19	.18
Disk and cultipack	8-foot	1.3	.34	.33	28	.12	.12
Harrow, springtooth	12-foot	1.8	.30	.28	84	.45	.42
Cultipack and harrow	10-foot	1.5	.36	.35	23	.12	.12
Cultipack	9-foot	1.0	.32	.30	9	.03	.03
Plant	2-row	1.0	.52	.49	55	.29	.27
Plant	4-row	1.0	.25	.24	45	.11	.11
Harrow, spiketooth	11-foot	1.0	.16	.16	27	.04	.04
Cultivate, first	2-row	1.0	.64	.61	96	.61	.59
Cultivate, other	2-row	2.1	.41	.38	96	.83	.77
Total preharvest						5.66	4.61
Field chop	---	1.0	1.07	.98	87	.93	.85
Field chop, contract	---	1.0	1.07	.98	7	.07	.07
Haul to silo	---	1.0	1.56	.56	94	1.47	.53
Blow into silo	---	1.0	.70	.70	87	.61	.61
Blow into silo, contract	---	1.0	.70	.70	7	.05	.05
Bind	1-row	1.0	.99	.90	6	.06	.05
Haul to silo	---	1.0	6.72	1.40	6	.40	.08
Chop and plow	---	1.0	1.05	1.05	6	.06	.06
Total harvest						3.65	2.30
Total						9.31	6.91

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey of approximately 30 farms in 1950, in southeastern Ohio. These farms are located in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley.

The farms surveyed averaged 226 total acres. In 1949, 125 acres were in crops, including 8 acres of corn harvested for silage. The average yield of corn silage was 13 tons an acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 18 to 26; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.18	9.65	1.74	100	1.74
Manure	Ton	10 1/	2.00	20.00	72	14.40
Mixed fertilizer	Cwt.	2.90	2.30	6.67	83	5.54
Limestone	Ton	3.2	3.80	12.16	17	2.07
Spray (2,4-D)	Pt.	.9	1.00	.90	33	.30
Twine	Lb.	4.6	.26	1.20	68	.82
Total materials						24.87

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Spraying	Acre	1.0	1.75	1.75	11	.19
Field chopping	Acre	1.0	17.35	17.35	13	2.26
Blowing into silo	Ton	13	1.35	17.55	14	2.46
Total contract work						4.91

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn silage, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	7.17	2.18	71	5.09	1.55
Apply manure, horses-sp.	65-bu.	1.0	9.16	16.66	1	.09	---
Spread lime	---	1.0	2.88	1.31	11	.32	.14
Plow, moldboard	3-14 inch	1.0	1.13	1.08	30	.34	.32
Plow, moldboard	2-14 inch	1.0	1.30	1.24	70	.91	.87
Disk, tandem	7-foot	2.1	.47	.45	100	.99	.94
Harrow, spiketooth	8-foot	1.0	.41	.38	37	.15	.14
Plant	4-row	1.0	.67	.33	28	.19	.09
Plant	2-row	1.0	.71	.60	53	.38	.32
Plant, horses	2-row	1.0	1.49	2.44	19	.28	---
Harrow, spiketooth	10-foot	1.2	.25	.23	22	.07	.06
Cultipack	---	1.0	.31	.28	31	.10	.09
Cultivate	2-row	2.7	.62	.58	100	1.67	1.57
Weed, rotary hoe	---	1.0	.28	.26	6	.02	.02
Spray	---	1.0	.21	.19	22	.05	.04
Spray, contract	---	1.0	.25	.22	11	.03	.02
Total preharvest						10.68	6.17
Bind	1-row	1.0	1.57	1.23	68	1.07	.84
Haul bundles	---	1.0	11.22	2.75	68	7.63	1.87
Chop and blow	---	1.0	3.86	1.68	68	2.62	1.14
Field chop	1-row	1.0	2.03	1.43	19	.39	.27
Field chop, contract	1-row	1.0	2.03	1.43	13	.26	.19
Haul to silo	---	1.0	4.15	1.33	32	1.33	.43
Blow into silo	---	1.0	2.82	1.68	18	.51	.30
Blow into silo, contract	---	1.0	2.82	1.68	14	.39	.24
Total harvest						14.20	5.28
Total 1/						24.88	11.45

1/ In addition horse work averaged 0.63 hour an acre.

CORN, SWEET (FRESH MARKET): RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 11 farms in 1951 producing sweet corn for fresh market, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 103 total acres. In 1950, 74 acres were in crops, including 11 in sweet corn for fresh market. The average yield of sweet corn was approximately 1.9 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 27; the most common was about 20.

Materials used and contract work hired, 1950 1/

MATERIAL USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.15	20.60	3.09	100	3.09
Manure	Ton	14	2/ 2.00	28.00	52	14.56
Mixed fertilizer	Cwt.	1.90	2.60	4.94	90	4.45
Phosphate fertilizer	Cwt.	2.00	3.60	7.20	13	.94
Total materials						23.04

1/ No contract work was reported on the farms surveyed in this area.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting sweet corn for fresh market, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	6.17	2.55	52	3.21	1.33
Fertilize, spreader	7-foot	1.0	1.33	.85	10	.13	.09
Plow, moldboard	2-14 inch	1.0	1.12	1.07	100	1.12	1.07
Field cultivate	10-foot	2.0	.32	.30	31	.20	.19
Disk, tandem	8-foot	1.7	.41	.41	56	.39	.39
Harrow, spiketooth	15-foot	2.3	.21	.20	94	.45	.43
Harrow, springtooth	12-foot	2.4	.40	.38	17	.16	.15
Disk and harrow	8-foot	1.8	.35	.35	20	.13	.13
Plant	2-row	1.0	.71	.68	90	.64	.61
Plant, horses	2-row	1.0	1.67	2.53	10	.17	---
Cultivate, first	2-row	1.0	1.00	.96	100	1.00	.96
Cultivate, other	2-row	3.0	.60	.55	100	1.80	1.65
Cultipack	10-foot	1.0	.55	.53	11	.06	.06
Total preharvest						9.46	7.06
Pick by hand	---	1.0	14.00	---	100	14.00	---
Bag and load	---	1.0	5.03	---	100	5.03	---
Haul to market, truck	---	1.0	.84	.56	100	.84	---
Total harvest						19.87	---
Total 1/						29.33	7.06

1/ In addition horse work averaged 0.25 hour an acre and truck use averaged 0.56 hour an acre.

CORN, SWEET (PROCESSING): RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey made in 1951 of approximately 17 farms, producing sweet corn for processing. These farms are located in eastern Wisconsin and northeastern Illinois, and are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 152 total acres. In 1950, 128 acres were in crops, including 9 in sweet corn for processing. The average yield of sweet corn was approximately 3.5 tons per acre.

Tractors provide most of the power used on farms in this area. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 27; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.15	20.60	3.09	100	3.09
Manure	Ton	14	1/ 2.00	28.00	52	14.56
Mixed fertilizer	Cwt.	1.90	2.60	4.94	90	4.45
Phosphate fertilizer	Cwt.	2.00	3.60	7.20	13	.94
Total materials						23.04

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picked by hand	Ton	3.5	2.20	7.70	100	7.70
Haul to cannery	Ton	3.5	1.80	6.30	100	6.30
Total contract work						14.00

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting sweet corn for processing, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	6.17	2.55	52	3.21	1.33
Fertilize, spreader	7-foot	1.0	1.33	.85	10	.13	.09
Plow, moldboard	2-14 inch	1.0	1.12	1.07	100	1.12	1.07
Field cultivate	10-foot	2.0	.32	.30	31	.20	.19
Disk, tandem	8-foot	1.7	.41	.41	56	.39	.39
Harrow, spiketooth	15-foot	2.3	.21	.20	94	.45	.43
Harrow, springtooth	12-foot	2.4	.40	.38	17	.16	.15
Disk and harrow	8-foot	1.8	.35	.35	20	.13	.13
Plant	2-row	1.0	.71	.68	90	.64	.61
Plant, horses	2-row	1.0	1.67	2.53	10	.17	---
Cultivate, first	2-row	1.0	1.00	.96	100	1.00	.96
Cultivate, other	2-row	3.0	.60	.55	100	1.80	1.65
Cultipack	10-foot	1.0	.55	.53	11	.06	.06
Total preharvest						9.46	7.06
Pick by hand, contract	---	1.0	9.68	---	100	9.68	---
Haul, trucks, contract	---	1.0	1.43	.86	100	1.43	---
Total harvest						11.11	
Total 1/						20.57	7.06

1/ In addition horse work averaged 0.25 hour per acre and truck use averaged 0.86 hour an acre.

CORN, SWEET (PROCESSING): RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey in 1951 of approximately 27 farms in southeastern Minnesota and west central Wisconsin, producing sweet corn for processing. These farms are in type-of-farming area IV-B2, a dairy and livestock area.

The farms surveyed averaged 191 total acres. In 1950, 145 acres were in crops, including 12 in sweet corn. The average yield of sweet corn was approximately 3.4 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 36; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Purchased seed	Bu.	0.22	9.80	2.16	100	2.16
Manure	Ton	13	1/ 2.00	26.00	48	12.48
Mixed fertilizer	Cwt.	1.30	2.40	3.12	41	1.28
Lime	Ton	2	1.50	3.00	4	.12
Total materials						16.04

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Picking by hand and loading	Acre	1.0	4.50	4.50	16	.72
Hauling and unloading	Ton	3.4	2.10	7.14	7	.50
Picking by hand, hauling	Acre	1.0	7.95	7.95	26	2.07
Picking by machine	Acre	1.0	8.30	8.30	12	1.00
Total contract work						4.29

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting sweet corn for processing, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	7.17	2.18	48	3.44	1.05
Fertilize, spreader	10-foot	1.0	.58	.55	8	.05	.04
Plow, moldboard	2-14 in.	1.0	1.32	1.26	100	1.32	1.26
Disk, tandem	8-foot	1.9	.35	.34	52	.35	.34
Disk, single	15-foot	2.0	.23	.22	19	.09	.08
Harrow, springtooth	12-foot	1.8	.44	.42	29	.23	.22
Harrow, spiketooth	20-foot	2.5	.14	.14	100	.35	.35
Plant	2-row	1.0	.68	.65	60	.41	.39
Plant, horses	2-row	1.0	.85	1.66	40	.34	---
Cultivate, first	2-row	1.0	.80	.77	88	.70	.68
Cultivate, first, horses	1-row	1.0	1.84	3.67	12	.22	---
Cultivate, other	2-row	2.7	.46	.42	88	1.09	1.00
Cultivate, other, horses	1-row	1.5	1.05	2.00	12	.19	---
Weed	8-foot	2.0	.55	.52	8	.09	.08
Total preharvest						8.87	5.49
Pick by hand and load	---	1.0	7.42	---	39	2.89	---
Pick by hand and load, c.	---	1.0	6.78	---	16	1.08	---
Haul and unload	---	1.0	2.26	.76	29	.66	.22
Haul and unload, truck	---	1.0	1.07	.60	19	.20	---
Haul, unload, truck, c.	---	1.0	.69	.46	7	.05	---
Pick by hand, haul, c.	---	1.0	19.15	1.74	26	4.98	.45
Pick by machine	2-row	1.0	1.10	1.05	7	.08	.07
Pick by machine, contract	2-row	1.0	.80	.77	12	.10	.09
Haul, truck	---	1.0	1.40	.66	19	.27	---
Total harvest						10.31	.83
Total 1/						19.18	6.32

1/ In addition, horse work averaged 1.46 hours an acre, and truck use 0.27 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 20 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 177 total acres. In 1950, 149 acres were in crops, including 16 in flax. The average yield of flax was approximately 22 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	0.8	3.85	3.08	61	1.88
Purchased seed	Bu.	.8	5.60	4.48	39	1.75
Manure	Ton	16	1/ 2.00	32.00	27	8.64
Mixed fertilizer	Cwt.	1.50	2.50	3.75	46	1.73
Spray (2,4-D)	Gal.	.1	4.50	.45	14	.06
Twine	Lb.	5.7	.27	1.54	26	.40
Total materials						14.46

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.00	5.00	9	45
Total contract work						45

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	7.81	0.55	27	2.11	0.15
Plow, moldboard	2-14 inch	1.0	1.14	1.12	100	1.14	1.12
Disk, tandem	8-foot	2.2	.43	.41	27	.26	.24
Harrow, springtooth	12-foot	2.2	.34	.33	75	.56	.55
Field cultivate	9-foot	2.8	.47	.45	19	.25	.24
Cultipack	12-foot	1.0	.21	.20	52	.11	.10
Seed, drill	8-foot	1.0	.47	.43	91	.43	.39
Seed by hand	---	1.0	.18	---	9	.02	---
Harrow, spiketooth	15-foot	1.2	.19	.18	69	.16	.15
Spray	27-foot	1.0	.09	.08	14	.01	.01
Total preharvest						5.05	2.95
Windrow	9-foot	1.0	.52	.38	46	.24	.17
Combine	6-foot	1.0	1.43	1.31	65	.93	.85
Combine, contract	12-foot	1.0	.80	.74	9	.07	.07
Haul from combine, truck	1½ ton	1.0	.62	.42	62	.38	---
Haul to market, truck	1½ ton	1.0	.62	.42	12	.07	---
Bind	7-foot	1.0	1.86	.89	26	.48	.23
Shock by hand	---	1.0	2.13	---	26	.55	---
Haul bundles	---	1.0	2.75	.46	26	.72	.12
Thresh	---	1.0	.95	.84	26	.25	.22
Haul grain	---	1.0	.49	.17	26	.13	.04
Total harvest						3.82	1.70
Total 1/						8.87	4.65

1/ In addition truck use averaged 0.31 hour an acre.

FLAX; RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 31 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 221 total acres. In 1950, 151 acres were in crops, including 17 in flax. The average yield of flax was approximately 10 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 29; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.7	4.05	2.84	24	0.68
Purchased seed	Bu.	.7	6.55	4.58	76	3.48
Manure	Ton	15	1/ 2.00	30.00	7	2.10
Mixed fertilizer	Cwt.	1.05	3.60	3.78	9	.34
Spray	Gal.	.16	5.35	.86	19	.16
Twine	Lb.	3.80	.23	.87	36	.31
Total materials						7.07

CONTRACT WORK HIRED

Swathing	Acre	1.0	1.00	1.00	3	.03
Combining	Acre	1.0	3.80	3.80	7	.27
Threshing	Bu.	10	.17	1.70	11	.19
Total contract work						.49

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75 bu.	1.0	4.83	2.20	7	0.34	0.15
Fertilize, spreader	8-foot	1.0	.46	.44	8	.04	.04
Plow, moldboard	3-16 inch	1.0	.72	.68	48	.35	.33
Plow, moldboard	2-14 inch	1.0	1.32	1.26	44	.58	.55
Plow, moldboard	4-14 inch	1.0	.58	.56	8	.05	.04
Harrow, spiketooth	20-foot	1.5	.15	.15	87	.19	.19
Harrow, springtooth	9-foot	1.6	.43	.41	23	.16	.15
Field cultivate	10-foot	2.9	.31	.29	41	.37	.34
Disk, single	12-foot	2.7	.34	.33	30	.28	.27
Disk, tandem	8-foot	2.0	.45	.43	46	.41	.40
Seed, drill	8-foot	1.0	.44	.40	100	.44	.40
Harrow, spiketooth	20-foot	1.1	.16	.16	59	.11	.11
Cultipack	10-foot	1.0	.37	.36	3	.01	.01
Spray	24-foot	1.0	.12	.11	19	.02	.02
Total preharvest						3.35	3.00
Swath	10-foot	1.0	.35	.34	31	.11	.11
Swath, contract	15-foot	1.0	.32	.30	3	.01	.01
Combine	8-foot	1.0	.66	.60	57	.38	.34
Combine, contract	12-foot	1.0	1.04	.96	7	.07	.07
Haul from combine, truck	---	1.0	.45	.31	56	.25	---
Haul from combine	---	1.0	.28	.19	3	.01	.01
Haul to market, truck	---	1.0	.74	.50	5	.04	---
Bind	7-foot	1.0	1.29	.69	36	.46	.25
Shock by hand	---	1.0	1.22	---	36	.44	---
Haul bundles	---	1.0	4.10	.52	8	.33	.04
Haul bundles, horses	---	1.0	1.77	.26	28	.50	---
Thresh	22-inch	1.0	.65	.44	25	.16	.11
Thresh, contract	26-inch	1.0	.55	.48	11	.06	.05
Haul grain	---	1.0	.56	.38	3	.02	.01
Haul grain, truck	---	1.0	.33	.22	33	.11	---
Total harvest						2.95	1.00
Total 1/						6.30	4.00

1/ In addition horse work averaged 0.07 hour an acre, and truck use 0.27 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA lV-B2, 1950

The data presented here are based on a survey of approximately 23 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area lV-B2, a dairy and livestock area.

The farms surveyed averaged 242 total acres. In 1950, 166 acres were in crops, including 27 in flax. The average yield of flax was approximately 16 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 26; the most common was 18.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.8	4.00	3.20	51	1.63
Purchased seed	Bu.	0.8	5.05	4.04	49	1.98
Manure	Ton	15.0	2/ 2.00	30.00	4	1.20
Mixed fertilizer	Cwt.	2.0	2.90	5.80	32	1.86
Twine	Lb.	3.4	.25	.85	53	.45
Total materials						7.12

1/ No contract work was reported by farms surveyed in this area.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area lV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	8.05	3.66	4	0.32	0.15
Fertilize, spreader	10-foot	1.0	.92	.58	27	.25	.16
Plow, moldboard	2-14 inch	1.0	1.25	1.20	88	1.10	1.06
Disk, tandem	12-foot	1.7	.28	.26	59	.28	.26
Disk, single	15-foot	2.2	.24	.23	20	.11	.10
Harrow, springtooth	12-foot	1.6	.33	.32	33	.17	.17
Harrow, spiketooth	21-foot	1.7	.13	.13	91	.20	.20
Cultipack	20-foot	1.5	.55	.52	31	.26	.24
Seed drill	10-foot	1.0	.41	.40	100	.41	.40
Harrow, spiketooth	22-foot	1.3	.12	.12	91	.14	.14
Total preharvest						3.24	2.88
Swath	9-foot	1.0	.47	.45	34	.16	.15
Combine	8-foot	1.0	.78	.72	47	.37	.34
Haul from combine	---	1.0	.85	.36	40	.34	.14
Haul to market, truck	---	1.0	.96	.65	7	.07	---
Bind	8-foot	1.0	1.08	.70	53	.57	.37
Shock by hand	---	1.0	1.36	---	53	.72	---
Haul bundles	---	1.0	4.34	.23	53	2.30	.12
Thresh	28-inch	1.0	.71	.42	53	.38	.22
Haul to mill, truck	---	1.0	.53	.36	5	.03	---
Haul grain, truck	---	1.0	.71	.31	48	.34	---
Total harvest						5.28	1.34
Total 1/						8.52	4.22

1/ In addition, truck use averaged 0.21 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 43 farms in 1950, producing flax in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri Valley.

The farms surveyed averaged 319 total acres. In 1949, 273 acres were in crops, including 47 acres in flax. The average yield of flax was approximately 13 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.0	7.15	7.15	100	7.15
Ceresan	Bu.	1.0	.09	.09	21	.02
Manure	Ton	5	1/ 2.00	10.00	6	.60
Mixed fertilizer (4-16-0)	Cwt.	1.80	1.90	3.42	9	.31
Nitrate fertilizer (33-0-0)	Cwt.	1.20	3.60	4.32	2	.09
Spray (2,4-D)	Gal.	.1	7.30	.73	32	.23
Twine	Lb.	2.2	.24	.53	9	.05
Total materials						8.45

CONTRACT WORK HIRED

Seed treating	Bu.	1.0	.36	.36	12	.04
Windrowing	Acre	1.0	1.20	1.20	14	.17
Combining	Acre	1.0	4.25	4.25	14	.60
Threshing	Bu.	13	.14	1.82	7	.13
Total contract work						.94

1/ Approximately 48 percent of the farmers in this area purchased flaxseed.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	1.43	0.65	6	0.09	0.04
Fertilize, endgate, sp.	---	1.0	.52	.40	8	.04	.03
Plow, moldboard	3-14 inch	1.0	.78	.75	23	.18	.17
Disk, single	15-foot	3.6	.21	.20	78	.59	.56
Disk, tandem	10-foot	1.3	.23	.22	16	.05	.05
Harrow	25-foot	2.0	.14	.13	87	.24	.23
Field cultivate	12-foot	1.0	.32	.31	6	.02	.02
Clean and treat seed	---	1.0	.12	---	9	.01	---
Treating seed, contract	---	1.0	.12	---	12	.01	---
Seed drill	12-foot	1.0	.30	.29	59	.18	.17
Seed endgate	---	1.0	.32	.20	34	.11	.07
Seed endgate, horses	---	1.0	.22	.41	7	.02	---
Roll	15-foot	1.0	.21	.20	47	.10	.09
Spray	24-foot	1.0	.34	.26	32	.11	.08
Pull or cut weeds	---	1.0	.43	---	25	.11	---
Total preharvest						1.86	1.51
Windrow	10-foot	1.0	.32	.31	77	.25	.24
Windrow, contract	10-foot	1.0	.32	.31	14	.04	.04
Combine	6-foot	1.0	.68	.65	48	.33	.31
Combine	12-foot	1.0	.44	.42	7	.03	.03
Combine, self-propelled	10-foot	1.0	.43	.37	22	.09	---
Combine, s.p., contract	10-foot	1.0	.43	.37	14	.06	---
Haul from combine	---	1.0	.33	.33	91	.30	.30
Bind	8-foot	1.0	1.28	.62	9	.12	.06
Shock by hand	---	1.0	1.77	---	9	.16	---
Haul bundles	---	1.0	1.59	1.52	2	.03	.03
Haul bundles, horses	---	1.0	1.54	2.73	7	.11	---
Thresh	28-inch	1.0	.41	.36	2	.01	.01
Thresh, contract	28-inch	1.0	.41	.36	7	.03	.03
Haul grain	---	1.0	.58	.73	4	.02	.03
Haul grain, horses	---	1.0	.34	.33	5	.02	---
Total harvest						1.60	1.08
Total 1/						3.46	2.59

1/ In addition, horse work averaged 0.22 hour an acre and self-propelled combines averaged 0.13 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 43 farms producing flax in 1949 in northeastern South Dakota and west central Minnesota. These farms are in type-of-farming area V-F4, a livestock and cash-grain area on the northwestern fringe of the Corn Belt.

The farms surveyed averaged 363 total acres per farm. In 1949, approximately 301 acres were in crops, including 52 in flax. The average yield of flax was about 10 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	0.8	6.10	4.88	100	4.88
Ceresan	Bu.	.8	.03	.02	21	.01
Manure	Ton	4	2/ 2.00	8.00	2	.16
Mixed fertilizer	Cwt.	2.00	3.40	6.80	2	.14
Spray (2,4-D)	Pt.	1.0	.67	.67	15	.10
Twine	Lb.	2.4	.23	.55	31	.17
Total materials						5.46

CONTRACT WORK HIRED

Cleaning and treating seed	Bu.	.8	.15	.12	26	.03
Windrowing	Acre	1.0	1.15	1.15	5	.06
Threshing	Bu.	10	.13	1.30	21	.27
Total contract work						.36

1/ Approximately 39 percent of the farmers in this area purchased flax seed.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	1.44	1.25	1	0.01	0.01
Apply manure, loader-sp.	---	1.0	1.31	1.14	1	.01	.01
Fertilize, spreader	10-foot	1.0	.34	.33	2	.01	.01
Plow, moldboard	2-14 inch	1.0	1.22	1.17	23	.28	.27
Plow, moldboard	3-14 inch	1.0	.86	.82	48	.41	.39
Plow, moldboard	4-14 inch	1.0	.69	.66	15	.10	.10
Disk, tandem	9-foot	1.3	.39	.37	6	.03	.03
Disk, single	15-foot	1.8	.24	.23	54	.23	.22
Field, cultivate	9-foot	1.0	.41	.40	23	.09	.09
Harrow, spiketooth	25-foot	2.0	.12	.11	100	.24	.22
Roll	12-foot	1.0	.26	.25	15	.04	.04
Clean and treat seed	---	1.0	.14	---	21	.03	---
Drill	11-foot	1.0	.31	.29	100	.31	.29
Harrow, spiketooth	25-foot	1.2	.12	.11	100	.14	.13
Weed by hand	---	1.0	.45	---	3	.01	---
Spray	30-foot	1.0	.20	.16	15	.03	.02
Total preharvest						1.97	1.83
Windrow	10-foot	1.0	.34	.33	64	.22	.21
Windrow, contract	10-foot	1.0	.34	.33	5	.02	.02
Combine	6-foot	1.0	.61	.56	43	.26	.24
Combine, self-propelled	12-foot	1.0	.36	.33	26	.09	---
Haul from combine	---	1.0	.29	.20	39	.11	.08
Haul from combine, t.	1½-ton	1.0	.26	.18	30	.08	---
Bind	8-foot	1.0	.97	.50	18	.17	.09
Bind	10-foot	1.0	.91	.46	13	.12	.06
Shock	---	1.0	.68	---	29	.20	---
Haul bundles	---	1.0	1.20	.65	17	.20	.11
Haul bundles, horses	---	1.0	1.78	3.10	14	.25	---
Thresh	24-inch	1.0	.33	.32	10	.03	.03
Thresh, contract	24-inch	1.0	.33	.32	21	.07	.07
Haul grain, truck	----	1.0	.28	.21	12	.03	.03
Total harvest						1.85	.94
Total 1/						3.82	2.77

1/ In addition horse work averaged 0.43 hour an acre, truck use 0.05 hour an acre, and self-propelled combine 0.09 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 46 farms in 1950 producing grain sorghum in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri River Valley.

The farms surveyed averaged 398 total acres. In 1949, 247 acres were in crops, including 38 acres in grain sorghum. The average yield of grain sorghum was approximately 22 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Lb.	12.0	0.06	0.72	100	0.72
Ceresan	Acre	1.0	.03	.03	58	.02
Mixed fertilizer	Cwt.	.95	3.10	2.94	22	.65
Spray (2,4-D)	Pt.	1.0	.95	.95	21	.20
Twine	Lb.	2.7	.27	.73	14	.10
Total materials						1.69

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Cultivating	Acre	1.0	1.90	1.90	17	.32
Spraying	Acre	1.0	2.50	2.50	4	.10
Combining	Acre	1.0	4.30	4.30	14	.60
Total contract work						1.02

1/ Approximately 66 percent of the farmers in this area purchased grain sorghum seed.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre: once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	2-14 inch	1.0	1.21	1.16	49	0.59	0.57
Disk, tandem	10-foot	1.6	.37	.35	61	.36	.34
Disk, single	12-foot	2.6	.34	.33	37	.33	.32
Harrow, spiketooth	15-foot	1.7	.24	.22	23	.09	.09
Plant, lister	2-row	1.0	.50	.46	91	.46	.42
Plant, horses	2-row	1.0	.85	.78	6	.05	---
Drill	8-foot	1.0	.38	.36	3	.01	.01
Cultipack	15-foot	1.0	.17	.16	15	.03	.02
Cultivate	2-row	3.2	.48	.46	80	1.23	1.18
Cultivate, contract	2-row	2.5	.48	.46	17	.20	.20
Spray	21-foot	1.0	.20	.18	17	.03	.03
Spray, contract	21-foot	1.0	.20	.18	4	.01	.01
Total preharvest						3.39	3.19
Combine	5-foot	1.0	.89	.85	48	.43	.41
Combine, self-propelled	12-foot	1.0	.31	.28	17	.05	---
Combine	12-foot	1.0	.75	.55	7	.05	.04
Combine, contract	5-foot	1.0	.89	.85	14	.12	.12
Haul grain, truck	1 ton	1.0	.20	.20	50	.10	---
Haul grain	---	1.0	.20	.20	50	.10	.10
Bind	1-row	1.0	1.72	1.38	14	.24	.19
Shock by hand	---	1.0	1.67	---	14	.23	---
Thresh and haul	---	1.0	4.62	.85	14	.65	.12
Total harvest						1.97	.98
Total 1/						5.36	4.17

1/ In addition, horse work averaged 0.05 hour an acre, self-propelled combine 0.05 hour an acre and truck use 0.10 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 40 farms, in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 195 total acres. In 1949, 107 acres were in crops, including 13 in grain sorghum. The average yield of grain sorghum was 18 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 25; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Lb.	6	0.06	0.36	100	0.36
Manure	Ton	5.0	2/2.00	10.00	14	1.40
Mixed fertilizer	Cwt.	.80	1.95	1.56	19	.30
Spray (2,4-D)	Gal.	.2	3.10	.62	4	.02
Twine	Lb.	3.0	.25	.75	32	.24
Total materials						2.32

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.15	4.15	6	.25
Threshing	Bu.	18	.10	1.80	18	.32
Total contract work						.57

1/ Approximately 46 percent of the farmers in this area purchased seed for grain sorghum.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area V-G1, western Missouri and eastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	60-bu.	1.0	3.01	1.00	14	0.42	0.14	---
Plow, moldboard	2-14 inch	1.0	1.26	1.21	71	.89	.86	---
Plow, moldboard, horses	2-12 inch	1.0	2.35	9.40	16	.38	---	1.50
Disk, tandem	7-foot	1.5	.58	.55	50	.44	.41	---
Disk, single	10-foot	2.0	.54	.52	21	.23	.22	---
Disk, single, horses	8-foot	2.0	.62	2.09	15	.19	---	.63
Harrow, spiketooth	14-foot	1.1	.31	.29	50	.17	.16	---
Harrow, spiketooth, h.	10-foot	1.2	.66	1.90	12	.10	---	.27
Plant	2-row	1.0	.71	.68	55	.39	.37	---
Plant, horses	2-row	1.0	1.14	2.18	34	.39	---	.74
List and plant, horses	1-row	1.0	1.85	4.88	11	.20	---	.54
Replant	2-row	1.0	.67	.64	2	.01	.01	---
Harrow, spiketooth	14-foot	1.0	.42	.38	11	.05	.04	---
Harrow, spiketooth, h.	9-foot	1.0	.68	1.31	6	.04	---	.08
Cultivate, first	2-row	1.0	.80	.77	70	.56	.54	---
Cultivate, first, horses	1-row	1.0	1.86	3.55	29	.54	---	1.03
Cultivate, other	2-row	1.5	.63	.60	66	.62	.59	---
Cultivate, other, horses	1-row	1.7	1.60	3.04	32	.87	---	1.65
Hoe by hand	---	1.0	2.78	---	4	.11	---	---
Spray	5-row	1.0	.47	.42	4	.02	.02	---
Total preharvest						6.62	3.36	6.44
Combine	5-foot	1.0	1.50	1.02	44	.66	.45	---
Combine, contract	5-foot	1.0	1.50	1.02	6	.09	.06	----
Haul from combine, truck	1½-ton	1.0	1.00	1.00	50	.50	---	---
Bind	1-row	1.0	1.44	1.38	16	.23	.22	---
Bind, horses	1-row	1.0	1.60	4.21	15	.24	---	.63
Cut by hand	---	1.0	9.58	---	1	.10	---	---
Shock by hand	---	1.0	2.00	---	32	.64	---	---
Thresh	26-inch	1.0	3.10	.84	14	.43	.12	---
Thresh, contract	26-inch	1.0	.85	.82	18	.15	.15	---
Haul grain, truck	1½-ton	1.0	.85	.82	32	.27	---	---
Top and haul, horses	---	1.0	9.81	16.42	18	1.77	---	2.96
Total harvest						5.08	1.00	3.59
Total 1/						11.70	4.36	10.03

1/ In addition truck use averaged 0.76 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 32 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck and mixed-farming area on the eastern shore of Lake Michigan.

The farms surveyed averaged 130 total acres. In 1950, 105 acres were in crops, including 19 in oats. The average yield of oats was approximately 52 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	2.1	0.90	1.89	57	1.08
Purchased seed	Bu.	2.1	1.50	3.15	43	1.35
Manure	Ton	12	1/2.00	24.00	16	3.84
Mixed fertilizer	Cwt.	1.75	2.45	4.29	62	2.66
Superphosphate	Cwt.	3.65	2.40	8.76	11	.96
Lime	Ton	2.0	3.65	7.30	6	.44
Marl	Yd.	12.0	1.65	19.80	4	.79
Twine	Lb.	3.8	.24	.91	19	.17
Total materials						11.29

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combine	Acre	1.0	4.80	4.80	20	.96
Thresh	Bu.	52.0	.06	3.12	7	.22
Total contract work						1.18

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	7.34	3.34	16	1.17	0.53
Plow, moldboard	2-14 in.	1.0	1.24	1.19	100	1.24	1.19
Disk, tandem	7-foot	1.5	.51	.48	70	.53	.50
Disk and cultipack	7-foot	2.2	.50	.47	21	.23	.22
Harrow, springtooth	12-foot	2.2	.34	.33	88	.66	.64
Cultipack	8-foot	1.1	.41	.39	43	.19	.18
Seed, drill	7-foot	1.0	.62	.57	100	.62	.57
Total preharvest						4.64	3.83
Combine	5-foot	1.0	1.13	.94	61	.69	.57
Combine, contract	8-foot	1.0	1.00	.70	20	.20	.14
Haul from combine	---	1.0	.86	.45	81	.70	.36
Bind	7-foot	1.0	1.02	.62	19	.19	.12
Shock by hand	---	1.0	1.54	---	19	.29	---
Haul bundles	---	1.0	3.39	1.16	19	.64	.22
Thresh	26-inch	1.0	2.64	.63	12	.32	.08
Thresh, contract	26-inch	1.0	2.44	.43	7	.17	.03
Total harvest						3.20	1.52
Total						7.84	5.35

OATS: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern North Dakota and western Minnesota. These farms are in type-of-farming area III-E2, a spring wheat, small grain, livestock, potato, and sugar beet area in the Red River Valley.

The farms surveyed average 506 total acres. In 1950, 437 acres were in crops, including 66 in oats. The average yield of oats was approximately 38 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	2.3	0.75	1.73	85	1.47
Purchased seed	do.	2.3	1.10	2.53	15	.38
Manure	Ton	12	1/ 2.00	24.00	10	2.40
Phosphate fertilizer	Cwt.	.85	3.20	2.72	18	.49
Twine	Lbs.	3.5	.25	.88	2	.02
Total materials						4.76

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	3.55	3.55	4	.14
Total contract work						.14

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area III-E2, eastern North Dakota and western Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.78	1.73	10	0.38	0.17
Plow, mold board	3-14 in.	1.0	.91	.87	94	.86	.82
Disk, single	18-foot	1.8	.15	.15	31	.08	.08
Disk, tandem	10-foot	1.3	.30	.28	16	.06	.06
Field cultivate	12-foot	1.9	.25	.24	59	.28	.27
Harrow, spiketooth	30-foot	1.5	.08	.07	89	.11	.09
Harrow, springtooth	16-foot	1.0	.25	.24	14	.04	.03
Seed, drill	14-foot	1.0	.21	.19	100	.21	.19
Harrow, spiketooth	30-foot	1.0	.09	.08	68	.06	.05
Total preharvest						2.08	1.76
Swath	12-foot	1.0	.22	.21	96	.21	.20
Combine	10-foot	1.0	.44	.37	72	.32	.27
Combine, self-propelled	12-foot	1.0	.23	.21	22	.05	---
Combine, contract	10-foot	1.0	.62	.57	4	.02	.02
Haul from combine, truck	---	1.0	.40	.27	92	.37	---
Haul to mill, truck	---	1.0	.28	.18	6	.02	---
Bind	8-foot	1.0	.87	.80	2	.02	.02
Shock by hand	---	1.0	1.90	---	2	.04	---
Haul bundles	---	1.0	2.64	1.08	2	.05	.02
Thresh	26-in.	1.0	1.20	.53	2	.02	.01
Total harvest						1.12	.54
Total 1/						3.20	2.30

1/ In addition, truck use averaged 0.26 hour an acre, and self-propelled combines were used 0.05 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 32 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 129 total acres. In 1950, 101 acres were in crops, including 27 in oats. The average yield of oats was approximately 60 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 29; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	2.3	0.85	1.96	69	1.35
Purchased seed	do.	2.3	2.50	5.75	31	1.78
Manure	Ton	17	1/ 2.00	34.00	30	10.20
Mixed fertilizer	Cwt.	1.55	2.60	4.03	56	2.26
Lime	Ton	.9	4.30	3.87	5	.19
Twine	Lb.	3.5	.27	.95	54	.51
Total materials						16.29

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	60	.08	4.24	20	.85
Total contract work						.85

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	85-bu.	1.0	7.49	2.62	30	2.25	0.79
Spread lime	8-foot	1.0	.95	.91	4	.04	.04
Plow, moldboard	2-14 in.	1.0	1.23	1.18	100	1.23	1.18
Field cultivate	9-foot	1.4	.46	.44	26	.17	.16
Disk, tandem	8-foot	2.5	.46	.44	14	.16	.15
Harrow, springtooth	12-foot	2.1	.33	.32	88	.61	.59
Harrow, spiketooth	15-foot	1.1	.25	.24	51	.14	.13
Seed, drill	9-foot	1.0	.52	.49	100	.52	.49
Harrow, spiketooth	15-foot	1.0	.22	.21	27	.06	.06
Cultipack	10-foot	1.0	.31	.29	60	.19	.17
Total preharvest						5.37	3.76
Combine	6-foot	1.0	1.44	1.20	46	.66	.55
Haul from combine, trucks	---	1.0	.70	.37	46	.32	---
Bind	6-foot	1.0	1.04	.72	54	.56	.39
Shock	---	1.0	1.85	---	54	1.00	---
Haul bundles	---	1.0	2.76	1.03	54	1.49	.56
Thresh	26-inch	1.0	1.53	.70	34	.52	.24
Thresh, contract	26-inch	1.0	.91	.47	20	.18	.09
Haul grain, truck	---	1.0	.70	.48	9	.06	---
Total harvest						4.79	1.83
Total 1/						10.16	5.59

1/ In addition truck use averaged 0.21 hour an acre

OATS: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 30 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 262 total acres. In 1950, 214 acres were in crops, including 49 in oats. The average yield of oats was approximately 39 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 31; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	2.6	0.85	2.21	76	1.68
Purchased seed	do.	2.6	1.30	3.38	24	.81
Manure	Ton	15	1/ 2.00	30.00	16	4.80
Mixed fertilizer	Cwt.	.90	4.20	3.78	6	.23
Nitrate fertilizer	do.	1.15	1.85	2.13	4	.09
Phosphate fertilizer (20%)	do.	1.55	3.20	4.96	28	1.39
Spray	Pt.	1.0	.67	.67	18	.12
Twine	Lb.	3.0	.26	.78	26	.20
Total materials						9.32

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	39	.05	1.95	10	.20
Total contract work						.20

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	90-bu.	1.0	4.04	1.69	16	0.65	0.27
Fertilize, spreader	10-foot	1.0	.31	.30	11	.03	.03
Plow, moldboard	2-14 in.	1.0	1.09	1.04	39	.43	.41
Plow, moldboard	3-14 in.	1.0	.54	.51	61	.33	.31
Disk, tandem	10-foot	1.5	.37	.37	59	.33	.33
Field cultivate	10-foot	1.7	.29	.27	43	.21	.20
Harrow, springtooth	12-foot	2.2	.28	.26	40	.25	.23
Harrow, spiketooth	20-foot	1.3	.16	.16	71	.15	.15
Seed, drill	10-foot	1.0	.40	.37	100	.40	.37
Harrow, spiketooth	20-foot	1.0	.17	.17	76	.13	.13
Spray	32-foot	1.0	.12	.11	18	.02	.02
Total preharvest						2.93	2.45
Windrow	10-foot	1.0	.34	.33	68	.23	.22
Combine	7-foot	1.0	.77	.64	74	.57	.47
Haul from combine, truck	1½-ton	1.0	.85	.32	62	.53	---
Haul from combine	---	1.0	.92	.42	12	.11	.05
Bind	8-foot	1.0	1.00	.61	26	.26	.16
Shock by hand	---	1.0	1.07	---	26	.28	---
Haul to thresher	---	1.0	3.85	3.04	17	.65	.52
Haul to thresher, horses	---	1.0	1.76	1.06	9	.16	---
Thresh	28-inch	1.0	.65	.38	16	.10	.06
Thresh, contract	28 inch	1.0	.78	.48	10	.08	.05
Haul grain, truck	1½-ton	1.0	.35	.24	9	.03	---
Haul grain	---	1.0	.37	.26	8	.03	.02
Total harvest						3.03	1.55
Total 1/						5.96	4.00

1/ In addition horse work averaged 0.10 hour an acre and truck use averaged 0.22 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 31 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy and livestock area.

The farms surveyed averaged 241 total acres. In 1950, 182 acres were in crops, including 38 in oats. The average yield of oats was approximately 40 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 26; the most common was about 17.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	2.7	0.83	2.24	89	1.99
Purchased seed	Bu.	2.7	2.08	5.62	11	.62
Manure	Ton	15	1/ 2.00	30.00	17	5.10
Mixed fertilizer	Cwt.	1.80	2.54	4.57	32	1.46
Lime	Ton	2.9	1.55	4.50	6	.27
Twine	Lb.	3.4	.24	.82	51	.42
Total materials						9.86

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	40	.04	1.60	36	.58
Total contract work						.58

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75 bu.	1.0	4.16	1.51	17	0.71	0.26
Fertilize, spreader	7-foot	1.0	.39	.37	8	.03	.03
Plow, moldboard	2-14 inch	1.0	1.22	1.17	53	.65	.62
Plow, moldboard	3-14 inch	1.0	.67	.64	36	.24	.23
Disk, tandem	8-foot	1.3	.36	.35	47	.22	.21
Disk, single	13-foot	2.2	.34	.33	33	.25	.24
Harrow, springtooth	12-foot	1.7	.33	.32	20	.11	.11
Harrow, spiketooth	20-foot	1.5	.14	.14	77	.16	.16
Seed, drill	10-foot	1.0	.58	.47	85	.49	.40
Seed, drill, horses	8-foot	1.0	.58	1.10	8	.05	---
Seed, endgate	11-foot	1.0	.41	.26	7	.03	.02
Harrow, spiketooth	20-foot	1.2	.18	.17	70	.15	.14
Total preharvest						3.09	2.42
Swath	8-foot	1.0	.74	.70	5	.04	.04
Combine	5-foot	1.0	.79	.73	49	.39	.36
Haul from combine	---	1.0	.99	.34	21	.21	.07
Haul from combine, truck	1½-ton	1.0	.76	.38	28	.21	---
Bind	8-foot	1.0	.84	.59	51	.43	.30
Shock by hand	---	1.0	1.27	---	51	.65	---
Haul bundles	---	1.0	1.21	.91	51	.62	.46
Thresh	32-foot	1.0	.84	.74	15	.13	.11
Thresh, contract	32-foot	1.0	.48	.22	36	.17	.08
Haul grain	---	1.0	.36	.19	31	.11	.06
Total harvest						2.96	1.48
Total 1/						6.05	3.90

1/ In addition horse work averaged 0.09 hour an acre and truck use 0.11 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 30 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy and cash crop area.

The farms surveyed averaged 130 total acres. In 1949, 93 acres were in crops, including 16 in oats. The average yield of oats was 39 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.3	1.45	3.34	100	3.34
Manure	Ton	9	2/ 2.00	18.00	17	3.06
Mixed fertilizer(2-12-6)	Cwt.	1.75	1.90	3.32	85	2.82
Spray (2,4-D)	Gal.	.2	8.50	1.70	7	.12
Twine	Lb.	2/3.5	2/ .25	.88	29	.26
Total materials						9.60

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.55	4.55	17	.77
Threshing	Bu.	39	.09	3.51	4	.14
Total contract work						.91

1/ Approximately 40 percent of the farmers in this area purchased seed oats.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.76	1.32	17	0.64	0.22
Plow, moldboard	2-14 inch	1.0	1.40	1.33	77	1.08	1.02
Disk, tandem	8-foot	2.1	.48	.46	76	.76	.74
Harrow, springtooth	9-foot	2.3	.44	.40	90	.91	.83
Cultipack	9-foot	1.3	.46	.42	31	.19	.17
Harrow and cultipack	9-foot	2.0	.38	.35	11	.08	.08
Seed, drill	8-foot	1.0	.66	.62	100	.66	.62
Cultipack	9-foot	1.0	.36	.39	10	.04	.04
Weed by hand	---	1.0	1.53	---	40	.61	---
Spray	---	1.0	.31	.28	7	.02	.02
Total preharvest						4.99	3.74
Windrow	6-foot	1.0	.90	.79	8	.07	.06
Combine	6-foot	1.0	1.20	.91	54	.65	.49
Combine, contract	6-foot	1.0	.90	.69	17	.15	.12
Haul from combine	---	1.0	1.09	.46	71	.77	.33
Bind	6-foot	1.0	1.61	.87	29	.47	.25
Shock by hand	---	1.0	2.09	---	29	.61	---
Haul bundles	---	1.0	5.19	1.26	29	1.51	.37
Thresh	---	1.0	.57	.48	25	.14	.12
Thresh, contract	---	1.0	.57	.48	4	.02	.02
Total harvest						4.39	1.76
Total						9.38	5.50

OATS: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey made in 1951 of approximately 31 farms producing oats in central Wisconsin. These farms are located in type-of farming area IV-F1, a dairy and general farming area.

The farms surveyed averaged 144 total acres per farm. In 1950, 85 acres were in crops, including 22 in oats. The average yield of oats was approximately 54 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 31; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	2.4	0.85	2.04	54	1.10
Purchased seed	Bu.	2.4	1.75	4.20	46	1.93
Manure	Ton	15.0	1/ 2.00	30.00	41	12.30
Mixed fertilizer	Cwt.	1.75	2.45	4.29	90	3.86
Lime	Ton	1.5	7.75	11.62	13	1.51
Twine	Lb.	3.9	.26	1.01	71	.72
Total materials						21.42

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing and storing	Bu.	54	.05	2.70	51	1.38
Total contract work						1.38

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	5.92	2.69	41	2.43	1.10
Spread lime	8-foot	1.0	.90	.86	15	.14	.13
Fertilize, spreader	8-foot	1.0	.41	.40	10	.04	.04
Plow, moldboard	2-14 inch	1.0	1.17	1.11	92	1.08	1.02
Disk, tandem	8-foot	1.1	.48	.46	27	.14	.14
Quackdig	8-foot	1.0	.46	.44	15	.07	.07
Harrow, springtooth	12-foot	1.7	.40	.38	52	.35	.34
Harrow, spiketooth	15-foot	1.5	.20	.19	37	.11	.10
Disk and harrow	9-foot	1.8	.37	.36	19	.13	.12
Plant	7-foot	1.0	.67	.61	90	.60	.55
Plant, horses	7-foot	1.0	1.16	2.22	10	.12	---
Cultipack	8-foot	1.0	.54	.51	20	.11	.10
Total preharvest						5.32	3.71
Bind	6-foot	1.0	1.52	.92	71	1.08	.65
Shock	---	1.0	1.86	---	71	1.32	---
Haul bundles	---	1.0	2.62	.88	71	1.86	.62
Thresh and store	28-inch	1.0	3.78	.69	20	.76	.14
Thresh and store, contract	28-inch	1.0	2.05	.45	51	1.05	.23
Combine	6-foot	1.0	.98	.90	29	.28	.26
Haul grain, trucks	---	1.0	1.19	.71	29	.35	---
Total harvest						6.70	1.90
Total 1/						12.02	5.61

1/ In addition, horse work averaged 0.22 hour an acre and truck use 0.21 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 40 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy-and general-farming area on the Lake Erie border.

The farms surveyed averaged 173 total acres. In 1949, 105 acres were in crops, including 19 in oats. The average yield of oats was 35 bushels per acre.

Tractors provide most of the power used on these farms. They were used for the operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.4	1.95	4.68	100	4.68
Manure	Ton	11	2/ 2.00	22.00	12	2.64
Mixed fertilizer	Cwt.	2.25	2.00	4.50	97	4.36
Lime	Ton	1.3	3.85	5.01	14	.70
Twine	Lb.	3.2	.27	.86	34	.29
Total materials						12.67

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.10	5.10	20	1.02
Threshing	Acre	35.2	.08	2.82	13	.37
Total contract work						1.39

1/ Approximately 61 percent of the farmers in this area purchased seed oats.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreaders	75-bu.	1.0	2.85	0.92	12	0.34	0.11
Spread lime	---	1.0	1.32	1.21	4	.05	.05
Plow, moldboard	2-14 inch	1.0	1.41	1.34	63	.89	.84
Plow, moldboard	2-12 inch	1.0	2.09	2.00	9	.19	.18
Plow, moldboard	1-16 inch	1.0	3.15	3.00	18	.57	.54
Disk, tandem	8-foot	2.0	.37	.36	32	.24	.23
Disk, tandem	7-foot	2.3	.52	.49	48	.58	.54
Harrow, springtooth	9-foot	1.6	.46	.42	58	.43	.39
Drill	6-foot	1.0	.82	.62	93	.76	.58
Drill, horses	5-foot	1.0	1.15	2.20	4	.05	---
Drill, contract	6-foot	1.0	.82	.62	3	.02	.02
Total preharvest						4.12	3.48
Combine	6-foot	1.0	1.54	.84	46	.71	.39
Combine, contract	6-foot	1.0	1.54	.84	20	.31	.17
Haul from combine	---	1.0	1.03	.40	66	.68	.26
Bind	7-foot	1.0	1.56	.91	34	.53	.31
Shock by hand	---	1.0	1.96	---	34	.67	---
Haul bundles	---	1.0	3.72	.94	34	1.26	.32
Thresh	28-inch	1.0	1.38	.53	21	.29	.11
Thresh, contract	28-inch	1.0	1.38	.53	13	.18	.07
Haul from thresher	---	1.0	.70	.23	34	.24	.08
Total harvest						4.87	1.71
Total 1/						8.99	5.19

1/ In addition horse work averaged 0.09 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 83 farms producing oats in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. The farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri Valley.

The farms surveyed averaged 264 total acres. In 1949, 215 acres were in crops, including 46 acres of oats. The average yield of oats was approximately 30 bushels per acre.

Tractors provided most of power used on these farms. They were used for the operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.7	0.95	2.56	100	2.56
Ceresan	Bu.	2.7	.04	.11	36	.04
Manure	Ton	6	2/ 2.00	12.00	4	.48
Mixed fertilizer	Cwt.	2.05	2.00	4.10	12	.49
Spray (2,4-D)	Pt.	.5	.62	.31	9	.03
Twine	Lb.	2.2	.26	.57	26	.15
Total materials						3.75

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.00	4.00	8	.32
Threshing	Bu.	30	.04	1.20	16	.19
Total contract work						.51

1/ Approximately 19 percent of the farmers purchased seed oats.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cut stalks	4-row	1.0	0.38	0.36	2	0.01	0.01
Apply manure, loader-sp.	---	1.0	3.95	3.59	4	.16	.14
Fertilize, spreader	---	1.0	.33	.32	12	.04	.04
Plow, moldboard	2-16 inch	1.0	1.02	.98	14	.14	.14
Disk, single	15-foot	2.1	.21	.20	84	.37	.35
Disk, tandem	9-foot	1.8	.31	.30	8	.04	.04
Harrow	20-foot	1.6	.14	.13	86	.19	.18
Clean and treat seed	---	1.0	.08	---	36	.03	---
Seed, endgate	---	1.0	.30	.18	49	.15	.09
Seed, endgate, horses	---	1.0	.22	.37	10	.02	---
Seed, drill	10-foot	1.0	.38	.36	41	.16	.15
Cultipack	15-foot	1.0	.18	.18	16	.03	.03
Spray	24-foot	1.0	.26	.22	9	.02	.02
Pull weeds	---	1.0	1.06	---	1	.01	---
Total preharvest						1.37	1.19
Windrow	9-foot	1.0	.43	.37	45	.19	.17
Combine	5-6-foot	1.0	.68	.65	66	.45	.43
Combine, contract	5-6-foot	1.0	.68	.65	8	.05	.05
Haul from combine	---	1.0	.22	.22	74	.16	.16
Bind	8-foot	1.0	1.17	.56	26	.30	.15
Shock by hand	---	1.0	.92	---	26	.24	---
Haul bundles	---	1.0	1.40	.96	13	.18	.12
Haul bundles, horses	---	1.0	1.52	2.64	13	.20	---
Thresh	---	1.0	.43	.24	10	.04	.02
Thresh, contract	---	1.0	.43	.24	16	.07	.04
Haul grain	---	1.0	.43	.41	26	.11	.11
Total harvest						1.99	1.25
Total 1/						3.36	2.44

1/ In addition, horses used averaged 0.38 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-B1, 1947

The data presented here are based on a survey made in 1948 of approximately 80 farms producing oats in central Iowa. These farms are located in type-of-farming area V-B1, a cash-corn, oats, and soybeans area in central Iowa.

The farms surveyed averaged 230 total acres per farm. In 1947, 218 acres were in crops, including 47 acres in oats. The average yield of oats was approximately 33 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 10 to 26; the most common was about 17.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	3.3	1.25	4.12	100	4.12
Manure	Ton	5	2/ 2.00	10.00	4	.40
Mixed fertilizer	Cwt.	1.55	2.55	3.95	15	3/ .30
Superphosphate	Cwt.	1.90	2.00	3.80	15	3/ .28
Lime	Ton	1.5	3.25	4.88	4	3/ .10
Total materials						5.20

CONTRACT WORK HIRED

Combining	Acre	1.0	3.83	3.83	21	.80
Threshing	Bu.	34	.023	.78	16	.12
Total contract work						.92

1/ Approximately 43 percent of the farmers in this area purchased seed oats.

2/ Estimated.

3/ One-half the fertilizer and lime is charged to oats, and one-half is charged to the hay crop which followed.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-B1, central Iowa, 1947

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	4.00	1.80	4	0.16	0.07
Disk, tandem	9-foot	2.2	.29	.28	21	.13	.13
Disk, single	15-foot	2.3	.21	.20	79	.38	.36
Harrow, springtooth	14-foot	2.0	.14	.13	2	.01	.01
Harrow, spiketooth	20-foot	1.2	.14	.14	97	.16	.16
Roll	13-foot	1.1	.22	.21	15	.04	.03
Seed, endgate	---	1.0	.41	.19	68	.28	.13
Seed, endgate, horses	---	1.0	.47	.51	32	.15	---
Total preharvest						1.31	.89
Windrow	8-foot	1.0	.59	.50	31	.18	.16
Windrow	9-foot	1.0	.38	.30	21	.08	.06
Combine	6-foot	1.0	1.12	.64	30	.34	.19
Combine	10-foot	1.0	.82	.37	14	.11	.05
Combine, contract	5-foot	1.0	.67	.67	21	.14	.14
Haul from combine	---	1.0	.66	.46	65	.43	.30
Bind	8-foot	1.0	.96	.46	25	.24	.12
Bind	10-foot	1.0	.73	.37	10	.07	.04
Shock	---	1.0	1.02	---	31	.32	---
Haul bundles	---	1.0	1.52	1.38	35	.53	.48
Thresh	28-inch	1.0	.28	.25	19	.05	.05
Thresh, contract	28-inch	1.0	.28	.25	16	.05	.04
Haul grain	---	1.0	.41	.23	35	.14	.08
Total harvest						2.68	1.71
Total 1/						3.99	2.60

1/ In addition horse work averaged 0.16 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-B2, 1947

The data presented here are based on a survey made in 1948 of approximately 63 farms producing oats in east central Illinois. These farms are located in type-of-farming area V-B2, a cash-corn, oats, and soybeans area in east central Illinois.

The farms surveyed averaged 226 total acres per farm. In 1947, 191 acres were in crops, including 42 in oats. The average yield of oats was approximately 35 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 9 to 36; the most common was about 19.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.5	1.50	3.75	100	3.75
Mixed fertilizer	Cwt.	2.75	1.80	4.95	4 2/	.10
Superphosphate	Cwt.	4.60	1.90	8.74	6 2/	.26
Rock phosphate	Ton	.50	18.20	9.10	8	.73
Lime	Ton	2.5	3.10	7.75	8	.62
Twine	Lb.	4.0	.25	1.00	3	.03
Total materials						5.49

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	3.55	3.55	29	1.03
Total contract work						1.03

1/ Approximately 31 percent of the farmers in this area purchased seed oats.
2/ One-half of fertilizer charged to oats, other half charged to hay crops which followed.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-B2, east central Illinois, 1947

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	2-14 inch	1.0	0.85	0.81	3	0.03	0.02
Disk, tandem	8-foot	1.3	.32	.31	47	.20	.19
Disk, single	12-foot	1.5	.21	.20	47	.15	.14
Harrow, spiketooth	20-foot	1.1	.13	.13	14	.02	.02
Disk and harrow	8-foot	1.0	.33	.32	4	.01	.01
Seed, endgate	---	1.0	.35	.20	53	.19	.11
Seed, endgate, horses	---	1.0	.32	.50	20	.06	---
Drill	10-foot	1.0	.31	.29	27	.08	.08
Disk, tandem	8-foot	1.2	.33	.32	30	.12	.12
Disk, single	12-foot	1.2	.22	.21	35	.09	.09
Harrow, spiketooth	20-foot	1.1	.14	.14	85	.13	.13
Total preharvest						1.08	.91
Windrow	8-foot	1.0	.58	.48	28	.16	.13
Windrow	10-foot	1.0	.56	.43	8	.04	.03
Combine	5-foot	1.0	.82	.68	18	.15	.12
Combine	6-foot	1.0	.84	.64	17	.14	.11
Combine	10-foot	1.0	.82	.50	33	.27	.16
Combine, contract	6-foot	1.0	.70	.64	29	.20	.19
Haul from combine	---	1.0	.55	.38	93	.51	.35
Haul from combine, horses	---	1.0	.34	.62	4	.01	---
Bind	8-foot	1.0	1.20	.55	3	.04	.02
Haul bundles	---	1.0	2.21	1.04	3	.07	.03
Thresh	22-inch	1.0	.28	.25	3	.01	.01
Haul grain	---	1.0	.55	.17	3	.01	.01
Total harvest						1.61	1.16
Total 1/						2.69	2.07

1/ In addition, horse work averaged 0.12 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-D1, 1949

The data presented here are based on a survey of approximately 28 farms in 1950, in southern Michigan, northwestern Ohio, and northeastern Indiana. These farms are in type-of-farming area V-D1 a livestock, dairy, soybean, and cash-grain area on the northeastern fringe of the Corn Belt.

The farms surveyed averaged 152 total acres. In 1949, 125 acres were in crops, including 23 in oats. The average yield of oats was approximately 45 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.1	1/1.45	3.04	100	3.04
Manure	Ton	5	2/2.00	10.00	2	.20
Fertilizer (2-12-6)	Cwt.	1.85	2.05	3.79	74	2.80
Total materials						6.04

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.35	4.35	14	.61
Hauling	Bu.	45	.05	2.25	2	.04
Total contract work						.65

1/ Approximately 31 percent of the farmers in this area purchased seed oats.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-D1, southern Michigan, northwestern Ohio, and northeastern Indiana, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.30	1.50	2	0.07	0.03
Plow, moldboard	2-14 inch	1.0	1.16	1.08	61	.71	.66
Disk, tandem	7-foot	1.7	.69	.66	85	.99	.95
Harrow, springtooth	9-foot	1.7	.34	.37	39	.23	.25
Harrow and cultipack	9-foot	1.8	.36	.33	25	.16	.15
Disk and harrow	7-foot	1.5	.43	.39	5	.03	.03
Disk and cultipack	7-foot	2.3	.40	.37	8	.07	.07
Cultipack	9-foot	1.0	.50	.45	5	.02	.02
Seed, drill	8-foot	1.0	.54	.49	100	.54	.49
Harrow, spiketooth	9-foot	1.0	.17	.16	14	.02	.02
Weed by hand	---	1.0	.38	---	12	.05	---
Total preharvest						2.89	2.67
Combine	6-foot	1.0	.93	.76	86	.80	.65
Combine, contract	6-foot	1.0	.85	.69	14	.12	.10
Haul from combine	---	1.0	.81	.38	76	.62	.29
Haul from combine, truck	1½-ton	1.0	.45	.28	22	.10	---
Haul, contract, truck	1½-ton	1.0	.55	.31	2	.01	---
Total harvest						1.65	1.04
Total 1/						4.54	3.71

1/ In addition, truck use averaged 0.07 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 42 farms producing oats in 1949 in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt Fringe.

The farms surveyed averaged 335 total acres per farm. In 1949, 262 acres were in crops, including 70 in oats. The average yield of oats was approximately 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed	Bu.	2.8	1.30	3.64	100	3.64
Ceresan	Bu.	2.8	.04	.11	25	.03
Manure	Ton	7	1/ 2.00	14.00	6	.84
Mixed fertilizer	Cwt.	1.45	3.00	4.35	4	.17
Twine	Lb.	2.6	.22	.57	50	.28
Total materials						4.96

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Cleaning and treating seed	Bu.	2.8	.05	.13	18	.02
Combining	Acre	1.0	3.35	3.35	14	.47
Threshing	Bu.	32	.04	1.28	28	.36
Total contract work						.85

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	4.27	2.78	6	0.26	0.17
Plow, moldboard	2-16 inch	1.0	1.14	1.09	15	.17	.16
Plow, moldboard	3-14 inch	1.0	.78	.75	47	.37	.35
Field, cultivate	10-foot	1.0	.49	.47	36	.18	.17
Disk, tandem	9-foot	1.7	.39	.37	10	.07	.06
Disk, single	15-foot	2.0	.23	.22	61	.28	.27
Harrow, spiketooth	25-foot	1.7	.12	.11	74	.15	.14
Clean seed	---	1.0	.13	---	32	.04	---
Clean and treat seed	---	1.0	.13	---	7	.01	---
Clean and treat seed, contract	---	1.0	.13	---	18	.02	---
Seed, drill	11-foot	1.0	.32	.30	92	.29	.28
Seed, endgate	---	1.0	.26	.12	6	.02	.01
Harrow, spiketooth	25-foot	1.2	.12	.11	45	.06	.06
Weed by hand	---	1.0	.92	---	6	.06	---
Spray	30-foot	1.0	.22	.15	23	.05	.03
Total preharvest						2.03	1.70
Windrow	12-foot	1.0	.30	.29	42	.13	.12
Combine	6-foot	1.0	.64	.58	12	.08	.07
Combine	12-foot	1.0	.43	.40	22	.09	.09
Combine, self-propelled	12-foot	1.0	.31	.29	2	.01	---
Combine, contract	6-foot	1.0	.64	.58	14	.09	.08
Haul from combine	---	1.0	.25	.12	25	.06	.03
Haul from combine, truck	---	1.0	.25	.12	25	.06	---
Bind	8-foot	1.0	.70	.50	27	.19	.14
Bind	10-foot	1.0	.78	.40	23	.18	.09
Shock by hand	---	1.0	.78	---	50	.39	---
Haul bundles	---	1.0	1.45	.94	3	.04	.03
Haul bundles, horses	---	1.0	1.17	2.00	39	.46	---
Haul bundles, haybuck	---	1.0	.95	.36	8	.08	.03
Thresh	28-inch	1.0	.23	.20	22	.05	.04
Thresh, contract	28-inch	1.0	.23	.20	28	.06	.06
Haul grain	---	1.0	.20	.17	46	.09	.08
Haul grain, contract	---	1.0	.20	.17	4	.01	.01
Total harvest						2.07	.87
Total 1/						4.10	2.57

1/ In addition, horse work averaged 0.78 hour an acre, truck used 0.03 hour an acre and self-propelled combine 0.01 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 48 farms, in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 286 total acres. In 1949, 183 acres were in crops, including 31 in oats. The average yield of oats was 26 bushels an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.5	1.15	2.88	100	2.88
Mixed fertilizer (4-12-4)	Cwt.	1.30	2.35	3.06	26	.80
Phosphate fertilizer	Cwt.	1.15	2.80	3.22	13	.42
Twine	Lb.	1.9	.20	.38	18	.07
Total materials						4.17

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.15	4.15	9	.37
Threshing	Bu.	26	.06	1.56	7	.11
Total contract work						.48

1/ Approximately 20 percent of the farmers in this area purchase seed oats.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-G1, western Missouri and eastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Plow, moldboard	2-14 inch	1.0	1.06	1.01	36	0.38	0.36	---
Disk, tandem	8-foot	2.3	.40	.38	62	.57	.54	---
Disk, single	14-foot	3.3	.28	.26	34	.31	.29	---
Harrow, spiketooth	15-foot	1.6	.24	.22	74	.28	.26	---
Disk and harrow	8-foot	1.0	.46	.44	5	.02	.02	---
Fertilize, endgate, h.	---	2.0	.39	.72	3	.02	---	0.04
Seed, drill	8-foot	1.0	.42	.40	74	.31	.30	---
Seed, endgate	---	1.0	.49	.47	8	.04	.04	---
Seed, endgate, horses	---	1.0	.30	.58	18	.05	---	.10
Total preharvest						1.98	1.81	.14
Combine	5-foot	1.0	.84	.68	73	.61	.50	---
Combine, contract	5-foot	1.0	.84	.68	9	.08	.06	---
Haul from combine, truck	1½-ton	1.0	.84	.68	82	.69	---	---
Bind	9-foot	1.0	.46	.37	18	.08	.07	---
Shock by hand	---	1.0	.62	---	18	.11	---	---
Haul bundles, horses	---	1.0	1.45	2.77	18	.26	---	.50
Thresh	26-inch	1.0	.33	.25	11	.04	.03	---
Thresh, contract	26-inch	1.0	.26	.19	7	.02	.01	---
Haul grain, horses	---	1.0	.59	.57	18	.11	---	.10
Total harvest						2.00	.67	.60
Total 1/						3.98	2.48	.74

1/ In addition truck use averaged 0.56 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-H1, 1950

The data presented here are based on a survey of approximately 38 farms in 1951 producing oats in southern Iowa, northern Missouri, and west central Illinois. The farms are in type-of-farming area V-H1, a livestock and pasture area.

The farms surveyed averaged 259 total acres. In 1950, 149 acres were in crops, including 27 acres in oats. The average yield of oats was approximately 37 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 27; the most common was about 17.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed [1]	Bu.	2.7	1.24	3.35	100	3.35
Manure	Ton	4	[2] 2.00	8.00	4	.32
Fertilizer (4-12-4)	Cwt.	2.00	2.20	4.40	34	1.50
Superphosphate (20%)	Cwt.	1.70	1.80	3.06	18	.55
Limestone	Ton	2.2	3.60	7.92	17	1.35
Twine	Lb.	2.2	.24	.53	18	.10
Total materials						7.17

CONTRACT WORK HIRED

Combining	Acre	1.0	4.15	4.15	33	1.37
Binding	Acre	1.0	2.00	2.00	1	.02
Threshing	Bu.	37	.05	1.85	15	.28
Total contract work						1.67

[1] Approximately 30 percent of the farmers in this area purchased seed oats.

[2] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-H1, southern Iowa, northern Missouri and west central Illinois, 1950

Operation	Size of equipment	Times over	Time per acre: once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.04	1.02	4	0.08	0.04	---
Spread lime	8-foot	1.0	.98	.60	17	.17	.10	---
Fertilize, spreader	10-foot	1.0	.68	.44	12	.08	.05	---
Fertilize, horses-sp.	8-foot	1.0	.89	1.20	7	.06	---	0.08
Plow, moldboard	3-14 inch	1.0	.88	.84	3	.03	.03	---
Plow, moldboard	2-14 inch	1.0	1.26	1.22	6	.08	.07	---
Disk, tandem	7-foot	1.7	.47	.45	85	.68	.65	---
Disk, single, horses	7-foot	1.3	2.63	5.25	3	.10	---	.20
Disk and harrow	7-foot	2.0	.51	.48	6	.06	.06	---
Harrow, spiketooth	18-foot	1.4	.25	.24	21	.07	.07	---
Seed, drill	10-foot	1.0	.58	.49	71	.41	.35	---
Seed, **endgate**, horses	---	1.0	1.10	2.10	29	.32	---	.61
Disk	7-foot	1.1	.47	.45	29	.15	.14	---
Harrow, spiketooth	18-foot	1.2	.25	.24	49	.15	.14	---
Harrow, spiketooth, h.	10-foot	1.0	.93	1.87	5	.05	---	.09
Total preharvest						2.49	1.70	.98
Combine	6-foot	1.0	1.02	.84	49	.50	.41	---
Combine, contract	6-foot	1.0	1.02	.84	33	.34	.28	---
Bind	8-foot	1.0	1.38	.71	17	.23	.12	---
Bind, contract	8-foot	1.0	1.38	.71	1	.01	.01	---
Shock by hand	---	1.0	1.10	---	18	.20	---	---
Haul bundles	---	1.0	3.50	.63	1	.04	.01	---
Haul bundles, horses	---	1.0	3.50	3.30	17	.60	---	.56
Thresh	28-inch	1.0	.74	.35	3	.02	.01	---
Thresh, contract	28-inch	1.0	.74	.35	15	.11	.05	---
Haul grain	---	1.0	.50	.24	74	.37	.18	---
Haul grain, truck	$1\frac{1}{2}$-ton	1.0	.50	.29	14	.07	---	---
Haul grain, horses	---	1.0	.58	1.17	12	.07	---	.14
Total harvest						2.56	1.07	.70
Total 1/						5.05	2.77	1.68

1/ In addition truck use averaged 0.04 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-H2, 1950

The data presented here are based on a survey of approximately 30 farms in 1951, in northwestern Indiana and southwestern Michigan. These farms are in type-of-farming area V-H2, a livestock and pasture area.

The farms surveyed averaged 160 total acres. In 1950, 137 acres were in crops, including 21 in oats. The average yield of oats was approximately 46 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 29; the most common was about 21.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	1.9	0.90	1.71	78	1.33
Purchased seed	Bu.	1.9	1.20	2.28	22	.50
Manure	Ton	15	1/ 2.00	30.00	23	6.90
Mixed fertilizer	Cwt.	1.90	2.25	4.28	90	3.85
Liquid fertilizer	Qt.	1.0	1.20	1.20	1	.01
Lime	Ton	1.1	4.15	4.57	15	.69
Total materials						13.28

CONTRACT WORK HIRED

Combining	Acre	1.0	4.34	4.34	18	.78
Total contract work						.78

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-H2, northwestern Indiana and southwestern Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	6.55	2.98	23	1.51	0.69
Topdress	10-foot	1.0	.58	.55	2	.01	.01
Plow, moldboard	2-14 inch	1.0	1.27	1.21	64	.81	.77
Plow, moldboard	3-14 inch	1.0	.75	.71	34	.26	.24
Disk, tandem	8-foot	1.4	.44	.42	70	.43	.41
Cultipack	8-foot	1.7	.55	.53	30	.28	.27
Harrow, springtooth	12-foot	2.2	.31	.29	92	.63	.59
Seed, drill	8-foot	1.0	.60	.55	100	.60	.55
Total preharvest						4.53	3.53
Combine	5-foot	1.0	.89	.78	82	.73	.64
Combine, custom	8-foot	1.0	.71	.65	18	.13	.12
Haul from combine	---	1.0	1.47	.55	63	.93	.35
Haul from combine, trucks	---	1.0	.56	.33	37	.21	---
Total harvest						2.00	1.11
Total 1/						6.53	4.64

1/ In addition, truck use averaged 0.12 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V1-G2, 1950

The data presented here are based on a survey of approximately 48 farms in 1951 producing oats in the Ozark Mountain and Border area of southeastern Missouri and southern Illinois. The farms are in type-of-farming area V1-G2, a dairy, livestock, and poultry area.

The farms surveyed averaged 200 total acres. In 1950, 112 acres were in crops, including 24 acres in oats. The average yield of oats was approximately 36 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 26; the most common was about 17.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.3	1.30	2.99	100	2.99
Manure	Ton	5	2/ 2.00	10.00	10	1.00
Mixed fertilizer (4-12-4)	Cwt.	1.66	2.15	3.57	84	3.00
Phosphate fertilizer	Cwt.	1.58	3.60	5.69	6	.34
Lime	Ton	2.2	2.90	6.38	11	.70
Twine	Lb.	2.3	.25	.58	73	.42
Total materials						8.45

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Plowing	Acre	1.0	2.40	2.40	5	.12
Disking	Acre	1.0	1.10	1.10	6	.07
Drilling	Acre	1.0	1.25	1.25	5	.06
Binding	Acre	1.0	1.70	1.70	8	.14
Threshing	Bu.	36	.06	2.16	70	1.51
Combining	Acre	1.0	4.00	4.00	11	.44
Hauling	Bu.	36	.03	1.08	5	.05
Total contract work						2.39

1/ Approximately 36 percent of the farmers in this area purchase seed oats.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V1-G2, southeastern Missouri and southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.30	1.15	8	0.18	0.09	---
Apply manure, spreader, h.	75-bu.	1.0	2.70	5.52	2	.05	---	0.11
Spread lime	8-foot	1.0	.98	.60	3	.03	.02	---
Fertilize spreader	8-foot	1.0	.68	.44	7	.05	.03	---
Plow, moldboard	3-14 inch	1.0	.85	.81	7	.06	.06	---
Plow, moldboard, contract	3-14 inch	1.0	.85	.81	5	.04	.04	---
Plow, moldboard	2-14 inch	1.0	1.23	1.18	13	.16	.15	---
Plow, moldboard	2-12 inch	1.0	1.44	1.39	46	.66	.64	---
Plow, moldboard, horses	1-14 inch	1.0	5.84	11.68	8	.47	---	.93
Disk, tandem	7-foot	1.3	.47	.45	57	.35	.33	---
Disk, tandem, contract	7-foot	1.3	.47	.45	6	.04	.04	---
Disk, single, horses	7-foot	1.6	2.63	5.25	12	.50	---	1.01
Disk and harrow	7-foot	1.3	.51	.48	7	.05	.04	---
Harrow, spiketooth	15-foot	1.3	.25	.24	54	.18	.17	---
Harrow, spiketooth, h.	10-foot	1.1	.93	1.87	13	.13	---	.27
Field cultivate	7-foot	1.3	.50	.47	8	.05	.05	---
Drill	8-foot	1.0	.58	.49	59	.34	.29	---
Drill, contract	8-foot	1.0	.58	.49	5	.03	.02	---
Drill, horses	6-foot	1.0	1.10	2.10	32	.35	---	.67
Seed by hand	---	1.0	1.22	---	4	.05	---	---
Total preharvest						3.77	1.97	2.99
Bind	8-foot	1.0	1.38	.71	58	.80	.41	---
Bind, contract	8-foot	1.0	1.38	.71	8	.11	.06	---
Bind, horses	6-foot	1.0	.91	1.74	7	.06	---	.12
Shock by hand	---	1.0	1.10	---	73	.80	---	---
Haul bundles	---	1.0	3.50	.63	9	.32	.06	---
Haul bundles, horses	---	1.0	3.50	3.30	64	2.24	---	2.11
Thresh	28-inch	1.0	.74	.35	3	.02	.01	---
Thresh, contract	28-inch	1.0	.74	.35	70	.52	.25	---
Haul grain, truck	1½ ton	1.0	.45	.21	37	.17	---	---
Haul grain	---	1.0	.43	.23	36	.15	.08	---
Combine	6-foot	1.0	1.02	.84	16	.17	.14	---
Combine, contract	6-foot	1.0	1.02	.84	11	.11	.09	---
Haul from combine	---	1.0	.43	.23	17	.07	.04	---
Haul from combine, truck	1½ ton	1.0	.45	.21	5	.02	---	
Haul grain, contract, truck	1½ ton	1.0	.45	.21	5	.02	---	
Total harvest						5.58	1.14	2.23
Total 1/						9.35	3.11	5.22

1/ In addition truck use averaged 0.10 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA VI-G3, 1950

The data presented here are based on a survey of approximately 36 farms in 1951 producing oats in the gray lands of southern Illinois. These farms are in type-of-farming area VI-G3, a dairy, livestock, and poultry area.

The farms surveyed averaged 257 total acres. In 1950, 203 acres were in crops, including 26 acres in oats. The average yield of wheat was approximately 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 26; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.2	1.15	2.53	100	2.53
Manure	Ton	6	2/ 2.00	12.00	3	.36
Mixed fertilizer(3-12-12)	Cwt.	1.60	2.25	3.60	14	.50
Phosphate fertilizer(20%)	Cwt.	4.55	1.70	7.74	8	.62
Phosphate fertilizer	Cwt.	10.00	1.10	11.00	7	.77
Potash fertilizer	Cwt.	1.85	2.95	5.46	12	.66
Lime	Ton	4.0	3.25	13.00	1	.13
Twine	Lb.	2.4	.24	.58	26	.15
Total materials						5.72

CONTRACT WORK HIRED

Binding	Acre	1.0	1.60	1.60	8	.13
Threshing	Bu.	32	.06	1.92	16	.31
Total contract work						.44

1/ Approximately 20 percent of the farmers in this area purchase seed oats.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area VI-G3, southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.00	1.50	3	0.09	0.04
Spread lime	10-foot	1.0	.98	.60	1	.01	.01
Fertilize, spreader	10-foot	1.0	.68	.44	6	.04	.03
Plow, moldboard	3-14 inch	1.0	.81	.78	3	.02	.02
Plow, moldboard	3-12 inch	1.0	.96	.93	3	.03	.03
Disk, tandem	7-foot	1.8	.44	.42	97	.77	.73
Harrow, spiketooth	20-foot	1.8	.23	.22	57	.24	.23
Clean seed	---	1.0	.12	---	15	.02	---
Seed, endgate	---	1.0	.58	.49	63	.37	.31
Seed, endgate, horses	---	1.0	1.10	2.10	37	.41	---
Harrow, spiketooth	20-foot	1.6	.23	.22	46	.17	.16
Total preharvest						2.17	1.56
Combine	6-foot	1.0	1.02	.84	74	.75	.62
Haul from combine, truck	1½-ton	1.0	.49	.23	37	.18	---
Haul from combine	---	1.0	.46	.24	28	.13	.07
Haul from combine, horses	---	1.0	.50	1.17	9	.04	---
Bind	8-foot	1.0	1.38	.71	18	.25	.13
Bind, contract	8-foot	1.0	1.38	.71	8	.11	.06
Shock by hand	---	1.0	1.10	---	26	.29	---
Haul bundles	---	1.0	3.50	.63	15	.53	.09
Haul bundles, horse	---	1.0	3.50	3.30	11	.39	---
Thresh	28-inch	1.0	.74	.35	10	.07	.04
Thresh, contract	28-inch	1.0	.74	.35	16	.12	.06
Haul grain	---	1.0	.46	.24	13	.06	.03
Haul grain, truck	1½-ton	1.0	.49	.23	10	.05	---
Haul grain, horses	---	1.0	.50	1.17	3	.02	---
Total harvest						2.99	1.10
Total 1/						5.16	2.66

1/ In addition horse work averaged 1.28 hours an acre and truck use 0.11 hour an acre.

PEAS FOR PROCESSING: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey made in 1951 of approximately 30 farms in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

Approximately 81 percent of the peas produced in this area are grown under contract. The cannery usually furnishes the seed and the farm operator and family do all the preharvest work using their own power and equipment. The processor supplies the labor, power, and machinery for harvesting.

The farms surveyed averaged 159 total acres. In 1950, 139 acres were in crops, including 13 in canning peas. The average yield of peas was approximately 2,555 pounds per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 27; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	3.7	5.80	21.46	100	21.46
Mixed fertilizer	Cwt.	2.25	2.40	5.40	98	5.29
Total materials						26.75

CONTRACT WORK HIRED

Seed, drill	Acre	1.0	.35	.35	8	.03
Mowing	Acre	1.0	2.70	2.70	52	1.40
Loading	Acre	1.0	1.60	1.60	34	.54
Load and haul	Acre	1.0	2.10	2.10	18	.38
Haul to vinery	Acre	1.0	7.10	7.10	39	2.77
Harvesting	Acre	1.0	3.20	3.20	29	.93
Haul to cannery	Acre	1.0	2.15	2.15	25	.54
Total contract work						6.59

1/ Approximately 43 percent of the farms in this area were furnished seed by the cannery.

Man labor, power, and machinery used by operation in producing and harvesting **peas** for processing, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	2-14 inch	1.0	1.08	1.03	99	1.07	1.02
Disk, tandem	8-foot	1.7	.46	.44	45	.35	.34
Field cultivate	9-foot	1.6	.42	.40	34	.23	.22
Quack dig	10-foot	3.2	.30	.40	16	.15	.20
Harrow, springtooth	12-foot	2.2	.40	.38	60	.53	.50
Harrow, spiketooth	20-foot	1.6	.13	.13	68	.14	.14
Fertilize	8-foot	1.0	.58	.55	3	.02	.02
Seed, drill	8-foot	1.0	.46	.42	92	.42	.39
Seed, drill, contract	8-foot	1.0	.72	.66	8	.06	.05
Cultipack	8-foot	1.0	.23	.22	27	.06	.06
Total preharvest						3.03	2.94
Mow	6-foot	1.0	.50	.47	19	.10	.09
Mow, contract	6-foot	1.0	.70	.67	52	.36	.35
Load, loader	---	1.0	1.89	1.21	11	.21	.13
Load, loader, contract	---	1.0	2.38	1.26	34	.81	.43
Haul to vinery, truck	---	1.0	.70	.31	6	.04	---
Haul to vinery, trk; contr.	---	1.0	1.07	.31	39	.42	---
Load and haul, truck	---	1.0	5.28	1.68	8	.42	---
Load & haul, trk; contract	---	1.0	2.99	1.68	18	.54	---
Harvesting, contract	---	1.0	.57	.55	29	.17	.16
Haul to cannery, truck	---	1.0	.68	.46	4	.03	---
Haul to cannery, trk; contr.	---	1.0	.81	.46	25	.20	---
Total harvest						3.30	1.16
Total 1/						6.33	4.10

1/ In addition truck use averaged 0.71 hour an acre.

PEAS FOR PROCESSING: RESOURCES USED IN PRODUCTION, AREA IV-F1, 1950

The data presented here are based on a survey made in 1951 of approximately 27 farms producing fresh peas in 1950 for processing. These farms are located in type-of-farming area IV-F1, a dairy and general farming area in central Wisconsin.

Approximately 89 percent of the peas produced in this area are grown under contract. The farm operator and family do all the preharvest work using their own power and equipment. The processor supplies practically all of the labor, power, and machinery for harvesting.

The farms surveyed averaged 131 total acres per farm. In 1950, 83 acres were in crops, including 12 in fresh peas for canning. The average yield of peas was approximately 2,550 pounds per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 31; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed, purchased	Bu.	4.00	5.05	20.20	100	20.20
Manure	Ton	20	1/2.00	40.00	26	10.40
Mixed fertilizer	Cwt.	1.80	2.40	4.32	94	4.06
Lime, (hydrated)	Ton	.2	15.00	3.00	7	.21
Total materials						34.87

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Mowing	Acre	1.0	3.05	3.05	89	2.71
Loading	Acre	1.0	1.75	1.75	74	1.30
Haul to vinery	Acre	1.0	1.75	1.75	75	1.31
Load and haul to vinery	Acre	1.0	4.45	4.45	8	.36
Total contract work						5.68

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting peas for processing, area IV-F1, central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.75	1.70	26	0.98	0.44
Lime	10-ft.	1.0	.45	.42	7	.03	.03
Plow, moldboard	2-14 inch	1.0	1.16	1.10	96	1.11	1.06
Disk	8-foot	1.9	.44	.42	36	.30	.29
Quackdig	8-foot	4.0	.47	.45	7	.13	.13
Harrow, springtooth	12-foot	3.2	.38	.37	90	1.10	1.06
Harrow, spiketooth	15-foot	1.4	.19	.18	16	.04	.04
Harrow, spiketooth, horses	10-foot	1.0	1.10	1.10	2	.02	---
Fertilize	10-foot	1.0	.41	.40	25	.10	.10
Seed, drill	8-foot	1.0	.79	.72	98	.77	.71
Seed, drill, horses	7-foot	1.0	1.15	2.30	2	.02	---
Cultipack	8-foot	1.0	.36	.35	64	.23	.22
Total preharvest						4.83	4.08
Mow, horses	5-foot	1.0	2.33	2.13	11	.26	---
Mow, contract	6-foot	1.0	.91	.80	89	.81	.71
Load	---	1.0	2.62	1.47	5	.13	.07
Load, contract	---	1.0	5.08	1.61	74	3.76	1.19
Haul to vinery	---	1.0	2.14	.84	4	.09	.03
Haul to vinery, contract, t.	---	1.0	2.14	.65	75	1.60	---
Load and haul to vinery	---	1.0	6.01	1.46	13	.78	.19
Load and haul to vinery, contract, truck	---	1.0	9.50	1.08	8	.76	---
Total harvest						8.19	2.19
Total 1/						13.02	6.27

1/ In addition, horse work averaged 0.30 hour an acre and truck use 0.58 hour an acre.

RED CLOVER SEED: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 16 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck and mixed farming area on the eastern shore of Lake Michigan. Approximately 100 percent of the farms in this area seeded red clover with a nurse crop. Farmers reported that hay seeding usually lasted two years, and 66 percent harvested a seed crop the first year. As a result, one-half of the man labor, power and machinery and materials used jointly in establishing the seeding and the nurse crop is charged to the red clover seed, and one-half of this is charged annually to the clover seed. All additional materials, man labor, power and machinery used directly in establishing the seed crop are prorated also to the annual charges for the seed crop according to the average life of the seeding.

The farms surveyed averaged 134 total acres. In 1950, 106 acres were in crops, including 20 acres in red clover harvested for seed. The average yield of red clover seed was approximately 2.4 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Establish seeding total:						
Red Clover seed	Lb.	10	0.50	5.00	100	5.00
Manure	Ton	8	1/ 2.00	16.00	30	4.80
Mixed fertilizer	Cwt.	2.30	2.50	5.75	35	2/ 1.00
Phosphate fertilizer	Cwt.	1.50	.60	.90	7	2/ .03
Superphosphate fertilizer	Cwt.	1.00	2.25	2.25	3	2/ .04
Lime	Ton	1.8	3.20	5.76	3	.17
Marl	Yd.	8.8	1.55	13.64	4	.55
Total for establishment						11.59
Annual chg. to Red Clover seed						5.80
Total materials used						5.80

CONTRACT WORK HIRED

Combining	Acre	1.0	4.75	4.75	47	2.23
Total contract work						2.23

1/ Estimated.

2/ Allocated one-half the cost to the nurse crop.

Man labor, power, and machinery used by operation in producing and harvesting red clover seed, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Establish seeding:							
Total clover seed 1/	---	---	---	---	---	2.20	1.77
Annual 2/	---	---	---	---	---	1.10	.89
Harrow, springtooth	---	1.0	0.32	0.30	70	.22	.21
Total preharvest						1.32	1.10
Combine	5-foot	1.0	1.14	1.04	53	.60	.55
Combine, contract	5-foot	1.0	.71	.65	47	.33	.31
Haul from combine	---	1.0	.25	.10	100	.25	.10
Total harvest						1.18	.96
Total						2.50	2.06

1/ In this area approximately 100 percent of the farms seeded legumes with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of red clover seedings in this area is approximately two years. The labor, power and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of seeding.

RYE: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 30 farms in 1951, in eastern North Dakota and western Minnesota. These farms are in type-of-farming area III-E2, a spring wheat, small grain, livestock, potato, and sugar beet area in the Red River Valley.

The farms surveyed averaged 490 total acres. In 1950, 370 acres were in crops, including 38 in rye. The average yield of rye was approximately 18 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 32; the most common was about 21.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.4	1.30	1.82	54	0.98
Purchased seed	do.	1.4	2.75	3.85	46	1.77
Phosphate fertilizer	Cwt.	1.50	3.55	5.33	8	.43
Twine	Lb.	2.8	.24	.67	7	.05
Total materials						3.23

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining, self-propelled	Acre	1.0	3.10	3.10	6	.19
Combining	do.	1.0	3.10	3.10	3	.09
Total contract work						.28

Man labor, power, and machinery used by operation in producing and harvesting rye, area III-E2, eastern North Dakota and western Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Fertilize, spreader	16-foot	1.0	0.38	0.36	8	0.03	0.03
Plow, moldboard	3-14 in.	1.0	.78	.75	76	.59	.57
Plow, duckfoot	12-foot	3.5	.39	.37	9	.12	.12
Field cultivate	12-foot	3.1	.26	.25	69	.56	.54
Disk, single	19-foot	2.1	.14	.14	48	.14	.14
Disk, tandem	10-foot	1.3	.29	.27	8	.03	.03
Harrow, dpringtooth	24-foot	1.3	.10	.09	12	.02	.01
Harrow, spiketooth	25-foot	1.3	.11	.11	95	.13	.13
Seed, drill	14-foot	1.0	.23	.21	100	.23	.21
Harrow, spiketooth	26-foot	1.0	.11	.11	53	.06	.06
Total preharvest						1.91	1.84
Swath	12-foot	1.0	.24	.23	93	.22	.21
Combine	9-foot	1.0	.67	.52	54	.36	.28
Combine, self-propelled	12-foot	1.0	.35	.32	30	.10	---
Combine, contract	9-foot	1.0	.70	.64	3	.02	.02
Combine, s.p., contract	12-foot	1.0	.26	.24	6	.02	---
Haul from combine	---	1.0	.75	.39	10	.08	.04
Haul from combine, truck	---	1.0	.51	.29	83	.42	---
Bind	8-foot	1.0	.97	.59	7	.07	.04
Shock by hand	---	1.0	.75	---	7	.05	---
Haul bundles	---	1.0	.43	.16	7	.03	.01
Thresh	---	1.0	.78	.15	7	.05	.01
Total harvest						1.42	.61
Total 1/						3.33	2.45

1/ In addition truck use averaged 0.24 hour an acre, and self-propelled combine 0.11 hour an acre.

RYE: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 321 total acres. In 1950, 202 acres were in crops, including 41 in rye. The average yield of rye was approximately 15 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 29; the most common was about 17.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.5	1.35	2.03	100	2.03
Nitrate fertilizer	Cwt.	.95	3.95	3.75	38	1.42
Lime	Ton	2.0	1.70	3.40	2	.07
Twine	Lb.	3.0	.25	.75	21	.16
Total materials						3.68

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Drill	Acre	1.0	3.30	3.30	4	.13
Combining	do.	1.0	3.85	3.85	11	.42
Total contract work						.55

Man labor, power, and machinery used by operation in producing and harvesting rye, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Fertilize, spreader	10-foot	1.0	0.32	0.31	34	0.11	0.11
Spread lime	8-foot	1.0	1.15	1.10	2	.02	.02
Plow, moldboard	2-14 in.	1.0	1.07	1.02	83	.89	.85
Disk, tandem	8-foot	1.4	.46	.44	37	.24	.23
Harrow, spiketooth	20-foot	1.4	.19	.18	70	.19	.18
Seed, drill	8-foot	1.0	.53	.48	96	.51	.46
Seed, drill, contract	8-foot	1.0	.53	.48	4	.02	.02
Total preharvest						1.98	1.87
Combine	5-foot	1.0	.95	.87	68	.65	.59
Combine, contract	6-foot	1.0	.68	.63	11	.07	.07
Haul from combine	---	1.0	1.20	.65	16	.19	.10
Haul from combine, truck	1½-ton	1.0	.54	.25	63	.34	---
Bind	8-foot	1.0	.85	.63	21	.18	.13
Shock by hand	---	1.0	.80	---	21	.17	---
Haul bundles	---	1.0	.95	.16	21	.20	.03
Thresh	26-inch	1.0	.39	.26	21	.08	.05
Haul grain	---	1.0	.22	.15	12	.03	.02
Haul grain, truck	---	1.0	.45	.17	9	.04	---
Total harvest						1.95	.99
Total 1/						3.93	2.86

1/ In addition, truck use averaged 0.18 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 25 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 400 total acres. In 1950, 252 acres were in crops, including 46 in soybeans. The average yield of soybeans was approximately 10 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 33; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.86	2.90	2.49	91	2.27
Purchased seed	Bu.	.86	3.40	2.92	9	.26
Total materials						2.53

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	3.80	3.80	8	.30
Total contract work						.30

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	2-14 in.	1.0	1.07	1.02	33	0.35	0.34
Plow, moldboard	3-14 in.	1.0	.60	.58	67	.40	.39
Disk, tandem	8-foot	1.2	.37	.37	65	.29	.29
Harrow, springtooth	12-foot	1.0	.32	.30	2	.01	.01
Harrow, spiketooth	15-foot	1.1	.21	.20	32	.07	.07
Harrow, spiketooth	20-foot	1.0	.15	.15	61	.09	.09
Seed, drill	10-foot	1.0	.59	.54	15	.09	.08
Plant	4-row	1.0	.31	.30	57	.18	.17
Plant	2-row	1.0	.53	.51	19	.10	.10
Plant, horses	2-row	1.0	.95	1.86	9	.09	---
Harrow, spiketooth	15-foot	1.4	.22	.21	42	.13	.12
Cultivate, first	2-row	1.0	.87	.83	57	.50	.47
Cultivate, other	2-row	2.3	.48	.44	57	.63	.58
Total preharvest						2.93	2.71
Combine	6-foot	1.0	.73	.67	92	.67	.62
Combine, contract	6-foot	1.0	.67	.62	8	.05	.05
Haul from combine, truck	1½-ton	1.0	.70	.29	76	.53	---
Haul from combine	---	1.0	.58	.26	24	.14	.06
Total harvest						1.39	.73
Total 1/						4.32	3.44

1/ In addition, horse work averaged 0.17 hour an acre and truck use averaged 0.22 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey in 1951 of approximately 31 farms in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy and livestock area.

The farms surveyed averaged 271 total acres. In 1950, 202 acres were in crops, including 44 in soybeans. The average yield of soybeans was approximately 9 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 28; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	0.9	2.95	2.66	78	2.07
Purchased seed	Bu.	.9	3.60	3.24	22	.71
Manure	Ton	9	1/ 2.00	18.00	4	.72
Mixed fertilizer	Cwt.	.95	2.95	2.80	7	.20
Total materials						3.70

CONTRACT WORK HIRED

Combining and loading	Acre	1.0	3.50	3.50	17	.60
Hauling and storing	Bu.	9	.02	.18	3	.01
Total contract work						.61

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area lV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	1.96	0.80	4	0.08	0.03
Plow, moldboard	2-14 inch	1.0	1.19	1.13	22	.26	.25
Plow, moldboard	3-14 inch	1.0	.68	.65	75	.51	.49
Disk, tandem	12-foot	1.6	.24	.23	25	.10	.09
Harrow, springtooth	12-foot	1.5	.31	.29	8	.04	.03
Harrow, spiketooth	20-foot	1.8	.13	.13	51	.12	.12
Plant	2-row	1.0	.45	.43	39	.18	.17
Plant	4-row	1.0	.66	.63	61	.40	.38
Harrow, spiketooth	20-foot	1.2	.15	.15	29	.05	.05
Cultivate, first	2-row	1.0	.76	.72	85	.65	.61
Cultivate, other	2-row	1.9	.43	.39	85	.69	.63
Total preharvest						3.08	2.85
Combine and load	6-foot	1.0	.64	.58	83	.53	.48
Combine and load, contract	5-foot	1.0	1.03	.95	17	.18	.16
Haul	---	1.0	.83	.35	13	.11	.05
Haul grain, truck	---	1.0	.52	.28	84	.44	---
Haul, truck, contract	---	1.0	.83	.45	3	.02	---
Total harvest						1.28	.69
Total 1/						4.36	3.54

1/ In addition, truck use averaged 0.25 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 12 farms in 1950, in east central Michigan. These farms are in the southern part of type-of-farming area IV-D1, a dairy and cash crop area.

The farms surveyed averaged 220 total acres. In 1949, 159 acres were in crops, including 12 in soybeans. The average yield of soybeans was 31 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 27; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.2	3.75	4.50	100	4.50
Sweet clover seed 2/	Lb.	12	.23	2.76	37	1.02
Inoculant	Bu.	1.2	.12	.14	100	.14
Manure	Ton	7	3/2.00	14.00	24	3.36
Fertilizer (2-12-6)	Cwt.	1.65	1.95	3.22	38	1.22
Total materials						10.24

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.00	4.00	17	.68
Hauling	Bu.	31	.05	1.55	14	.22
Total contract work						.90

1/ In this area approximately 34 percent of the farmers purchased soybean seed.

2/ Sweet clover seed was seeded with small grains the year before and plowed under.

3/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	----	1.0	3.76	1.32	24	0.90	0.32
Plow, moldboard	2-14 inch	1.0	1.11	1.06	100	1.11	1.06
Disk, tandem	8-foot	1.8	.37	.36	87	.58	.57
Harrow, springtooth	9-foot	2.7	.37	.34	61	.61	.56
Cultipack	9-foot	1.0	.38	.35	33	.13	.12
Harrow and cultipack	9-foot	3.3	.33	.30	39	.43	.39
Plant	4-row	1.0	.48	.45	52	.25	.23
Drill	8-foot	1.0	.54	.49	48	.26	.24
Weed by hand	---	1.0	6.67	---	18	1.20	---
Weed, rotary hoe	2-row	1.0	.33	.30	5	.02	.02
Cultivate	2-row	3.4	.87	.82	58	1.72	1.62
Total preharvest						7.21	5.13
Combine	6-foot	1.0	1.47	.91	83	1.22	.76
Combine, contract	6-foot	1.0	1.28	1.05	17	.22	.18
Haul	---	1.0	.29	.17	86	.25	.15
Haul, truck, contract	---	1.0	.40	.23	14	.06	---
Total harvest						1.75	1.09
Total 1/						8.96	6.22

1/ In addition, truck use averaged 0.03 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 58 farms in 1950 producing soybeans in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. The farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri Valley.

The farms surveyed averaged 279 total acres. In 1949, 230 acres were in crops, including 28 acres in soybeans. The average yield of soybeans was approximately 27 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	1.4	2.20	3.08	50	1.54
Purchased seed	Bu.	1.4	3.45	4.83	50	2.41
Inoculant	Bu.	1.4	.11	.15	88	.13
Manure	Ton	6	1/ 2.00	12.00	6	.72
Total materials						4.80

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.15	4.15	15	.62
Total contract work						.62

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota and northeastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure, loader	---	1.0	3.30	2.88	3	0.10	0.09
Apply manure, spreader	60-bu.	1.0	4.32	2.53	6	.26	.15
Plow, moldboard	2-16 in.	1.0	1.08	1.03	77	.83	.79
Disk, single	15-foot	3.0	.22	.21	67	.44	.42
Disk, tandem	9-foot	2.3	.36	.34	32	.27	.25
Harrow, springtooth	10-foot	1.3	.33	.32	29	.12	.12
Harrow, spiketooth	20-foot	2.4	.13	.12	96	.30	.28
Treat seed	---	1.0	.05	---	17	.01	---
Surface plant	4-row	1.0	.35	.32	38	.13	.12
Surface plant, horses	2-row	1.0	.77	1.47	5	.04	---
List and plant	2-row	1.0	.63	.50	22	.14	.11
Surface plant	2-row	1.0	.58	.50	19	.11	.09
Drill	10-foot	1.0	.43	.41	16	.07	.07
Cultivate, first rate	2-row	2.0	.55	.53	56	.62	.59
Cultivate, first rate	4-row	2.0	.26	.25	29	.15	.15
Cultivate, other rate	2-row	1.2	.39	.37	29	.14	.13
Cultivate, other rate	4-row	1.2	.18	.18	4	.01	.01
Rotary hoe	14-foot	1.0	.16	.15	22	.04	.03
Hoe by hand	---	1.0	1.52	---	42	.64	---
Total preharvest						4.42	3.40
Combine, power take-off	5-foot	1.0	.95	.91	24	.23	.22
Combine	6-foot	1.0	.77	.74	55	.42	.41
Combine, self-propelled	12-foot	1.0	.48	.46	6	.03	.03
Combine, contract	6-foot	1.0	.77	.74	15	.12	.11
Haul from combine	---	1.0	.32	.32	100	.32	.32
Total harvest						1.12	1.09
Total 1/						5.54	4.49

1/ In addition, horse work averaged 0.07 hour an acre

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-B1, 1947

The data presented here are based on a survey made in 1948 of approximately 57 farms producing soybeans in central Iowa. These farms are located in type-of-farming area V-B1, a cash-corn, oats, and soybeans area in central Iowa.

The farms surveyed averaged 230 total acres per farm. In 1947, 218 acres were in crops, including 41 acres in soybeans. The average yield of soybeans was approximately 16 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 10 to 26; the most common was about 17.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.2	3.70	4.44	100	4.44
Manure	Ton	5	2/2.00	10.00	3	.30
Total materials						4.74

CONTRACT WORK HIRED

Combining	Acre	1.0	3.95	3.95	31	1.22
Total contract work						1.22

1/ Approximately 49 percent of the farmers surveyed in this area purchased soybean seed.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-B1, central Iowa, 1947

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	2.50	2.00	3	0.07	0.06
Plow, moldboard	2-14 inch	1.0	1.20	1.14	46	.55	.52
Plow, moldboard	2-16 inch	1.0	1.19	1.13	29	.35	.33
Plow, moldboard	2-18 inch	1.0	1.10	1.05	2	.02	.02
Plow, moldboard	3-14 inch	1.0	.92	.88	14	.13	.12
Plow, moldboard	3-16 inch	1.0	.77	.74	9	.07	.07
Disk, tandem	9-foot	1.9	.32	.31	19	.12	.11
Disk, single	15-foot	2.1	.22	.21	80	.37	.35
Harrow, springtooth	14-foot	1.2	.25	.24	13	.04	.04
Harrow, spiketooth	20-foot	1.8	.16	.14	98	.28	.25
Plant	2-row	1.0	.52	.46	56	.29	.26
Plant	4-row	1.0	.34	.31	33	.11	.10
Plant, horses	2-row	1.0	.72	1.25	11	.08	---
Cultivate	2-row	2.9	.47	.45	88	1.20	1.15
Cultivate	4-row	2.6	.29	.28	10	.08	.07
Total preharvest						3.76	3.45
Combine	5-foot	1.0	1.03	.73	43	.44	.31
Combine	6-foot	1.0	.98	.60	12	.12	.07
Combine	9-foot	1.0	.98	.45	14	.14	.06
Combine, contract	6-foot	1.0	.60	.60	31	.19	.19
Haul from combine	---	1.0	.57	.43	100	.57	.43
Total harvest						1.46	1.06
Total 1/						5.22	4.51

1/ In addition, horse work averaged 0.14 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-B2, 1947

The data presented here are based on a survey made in 1948 of approximately 50 farms producing soybeans in 1947 in east central Illinois. These farms are located in type-of-farming area V-B2, a cash-corn, oats, and soybeans area in east central Illinois.

The farms surveyed averaged 226 total acres per farm. In 1947, 191 acres were in crops, including 37 in soybeans. The average yield of soybeans was approximately 21 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 9 to 36; the most common was about 19.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	3.20	4.48	100	4.48
Inoculant	Bu.	1.4	.09	.13	48	.06
Seed cleaning	Bu.	1.4	.05	.07	34	.02
Rock phosphate	Ton	.50	18.20	9.10	8	.73
Lime	Ton	2.5	3.10	7.75	8	.62
Total materials						5.91

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.08	4.08	28	1.14
Total contract work						1.14

1/ Approximately 16 percent of the farmers in this area purchased soybean seed.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-B2, east central Illinois, 1947

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Disk, tandem	8-foot	1.4	0.32	0.31	44	0.20	0.19
Disk, single	11-foot	2.0	.23	.22	13	.06	.06
Plow, moldboard	2-14 inch	1.0	1.10	1.05	31	.34	.33
Plow, moldboard	2-16 inch	1.0	.88	.84	9	.08	.08
Plow, moldboard	3-12 inch	1.0	.91	.87	2	.02	.02
Plow, moldboard	3-14 inch	1.0	.81	.78	41	.33	.32
Disk, tandem	8-foot	1.7	.32	.31	43	.23	.23
Disk, single	12-foot	2.0	.21	.20	25	.11	.10
Disk and harrow	8-foot	2.0	.34	.33	15	.10	.10
Harrow, springtooth	9-foot	1.0	.33	.32	13	.04	.04
Harrow, spiketooth	20-foot	1.5	.13	.12	29	.06	.05
Harrow, spiketooth	24-foot	1.2	.12	.11	41	.06	.05
Plant	2-row	1.0	.47	.41	28	.13	.11
Plant, horses	2-row	1.0	.63	1.21	3	.02	---
Plant	4-row	1.0	.32	.28	38	.12	.11
Drill	10-foot	1.0	.31	.30	31	.10	.09
Harrow, spiketooth	20-foot	1.2	.12	.11	11	.02	.01
Harrow, spiketooth	24-foot	1.0	.14	.13	30	.04	.04
Rotary hoe	2-row	1.0	.24	.23	3	.01	.01
Rotary hoe	4-row	1.6	.18	.18	32	.09	.09
Cultivate	2-row	2.2	.40	.38	64	.56	.54
Cultivate	4-row	1.8	.29	.28	8	.04	.04
Total preharvest						2.76	2.61
Combine	5-foot	1.0	.96	.80	14	.13	.11
Combine	6-foot	1.0	.88	.62	18	.16	.11
Combine	10-foot	1.0	.83	.51	40	.33	.20
Combine, contract	6-foot	1.0	.62	.62	28	.17	.17
Haul from combine	---	1.0	.53	.40	100	.53	.40
Total harvest						1.32	.99
Total 1/						4.08	3.60

1/ In addition, horse work averaged 0.04 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-D1, 1949

The data presented here are based on a survey of approximately 36 farms in 1950, in southern Michigan, northwestern Ohio, and northeastern Indiana. These farms are in type-of-farming area V-D1, a livestock, dairy, soybean, and cash-grain area, on the northeastern fringe of the Corn Belt.

The farms surveyed averaged 173 total acres. In 1949, 150 were in crops, including 25 in soybeans. The average yield of soybeans was approximately 28 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 29; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost Per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.5	3.90	5.85	100	5.85
Inoculant	Bu.	1.5	.15	.22	67	.15
Manure	Ton	10	2/2.00	20.00	4	.80
Fertilizer (3-12-12)	Cwt.	1.70	2.25	3.82	32	1.22
Total materials						8.02

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost Per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.10	4.10	29	1.19
Hauling	Bu.	28	.05	1.40	10	.14
Total contract work						1.33

1/ Approximately 25 percent of the farmers in this area purchased soybean seed.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-D1, southern Michigan, northwestern Ohio, and northeastern Indiana, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.30	1.50	4	.13	.06
Plow, moldboard	2-14 inch	1.0	1.10	1.05	75	.82	.79
Disk	8-foot	2.3	.42	.40	88	.85	.81
Harrow, springtooth	12-foot	1.7	.29	.25	63	.31	.26
Cultipack	8-foot	1.8	.42	.40	11	.08	.08
Harrow and cultipack	8-foot	3.0	.47	.43	4	.06	.05
Disk and cultipack	7-foot	1.2	.37	.34	8	.04	.03
Seed, drill	10-foot	1.0	.54	.48	55	.30	.26
Plant	2-row	1.0	.56	.52	45	.25	23
Harrow, spiketooth	9-foot	1.0	.24	.22	14	.03	.03
Cultipack	8-foot	1.0	.30	.28	7	.02	.02
Weed	2-row	1.5	.36	.34	2	.01	.01
Weed by hand	---	1.0	1.12	---	16	.18	---
Rotary hoe	2-row	1.4	.32	.30	40	.18	.17
Cultivate	2-row	2.5	.56	.52	50	.70	.65
Total preharvest						3.96	3.45
Combine	6-foot	1.0	.96	.78	71	.68	.55
Combine, contract	6-foot	1.0	.90	.73	29	.26	.21
Haul from combine	---	1.0	.54	.28	68	.37	.19
Haul from combine, truck		1.0	.30	.19	22	.07	---
Haul, contract, truck		1.0	.63	.36	10	.06	---
Total harvest						1.44	.95
Total 1/						5.40	4.40

1/ In addition, truck use averaged 0.08 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 31 farms producing soybeans in 1949 in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 252 total acres per farm. In 1949, 204 acres were in crops, including 28 in soybeans. The average yield of soybeans was approximately 16 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.2	2.90	3.48	100	3.48
Inoculant	Bu.	1.2	.10	.12	75	.09
Manure	Ton	6	2/2.00	12.00	8	.96
Mixed fertilizer	Cwt.	1.85	2.10	3.88	10	.39
Total materials						4.92

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	3.75	3.75	32	1.20
Total contract work						1.20

1/ Approximately 17 percent of the farmers in this area purchased soybean seed.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.05	2.08	8	0.24	0.17
Plow, moldboard	2-16 inch	1.0	1.12	1.07	79	.88	.85
Plow, moldboard	3-14 inch	1.0	.87	.83	21	.18	.17
Disk, tandem	8-foot	1.3	.61	.58	12	.10	.09
Disk, single	15-foot	2.0	.33	.32	65	.43	.42
Harrow, springtooth	9-foot	2.0	.55	.53	48	.53	.51
Harrow, spiketooth	22-foot	2.2	.14	.13	90	.28	.26
Inoculate seed	---	1.0	.06	---	75	.04	---
Plant	2-row	1.0	.61	.58	75	.46	.44
Plant	4-row	1.0	.32	.31	19	.06	.06
Plant, horses	2-row	1.0	.77	1.47	6	.05	---
Cultivate, first	2-row	2.6	.58	.55	100	1.51	1.43
Cultivate, other	2-row	1.4	.44	.42	38	.23	.22
Weed by hand	---	1.0	.66	---	29	.19	---
Total preharvest						5.18	4.62
Combine	6-foot	1.0	.96	.88	55	.53	.48
Combine	10-foot	1.0	.76	.69	4	.03	.03
Combine, self-propelled	12-foot	1.0	.50	.46	9	.04	---
Combine, contract	6-foot	1.0	.96	.88	32	.31	.28
Haul from combine	---	1.0	.24	.18	100	.24	.18
Total harvest						1.15	.97
Total 1/						6.33	5.59

1/ In addition, horse work averaged 0.09 hour an acre, and self-propelled combine 0.04 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 39 farms growing soybeans in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 360 total acres. In 1949, 222 acres were in crops, including 33 in soybeans. The average yield of soybeans was 19 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	0.9	3.50	3.15	100	3.15
Inoculant	Bu.	.9	.11	.10	59	.06
Manure	Ton	3	2/2.00	6.00	4	.24
Mixed fertilizer	Cwt.	1.30	1.85	2.40	39	.94
Nitrate fertilizer	Cwt.	1.00	3.75	3.75	1	.04
Phosphate fertilizer	Cwt.	.75	3.60	2.70	2	.05
Total materials						4.48

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	3.80	3.80	18	.68
Total contract work						.68

1/ Approximately 28 percent of the farmers in this area purchase soybean seed.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-G1, western Missouri and eastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	60-bu.	1.0	3.01	1.00	4	0.12	0.04
Plow, moldboard	2-14 inch	1.0	1.12	1.07	97	1.09	1.04
Disk, tandem	7-foot	2.1	.42	.42	80	.71	.71
Disk, single	14-foot	2.6	.32	.32	18	.15	.15
Harrow, spiketooth	15-foot	1.4	.32	.31	63	.28	.27
Inoculate	---	1.0	.53	---	1/ 7	.04	---
Plant	2-row	1.0	.79	.73	89	.70	.65
Plant, horses	2-row	1.0	1.18	2.16	11	.13	---
Harrow, spiketooth	12-foot	1.0	.30	.29	23	.07	.07
Cultivate, first	2-row	1.0	.72	.69	89	.64	.61
Cultivate, other	2-row	1.5	.55	.55	85	.70	.70
Total preharvest						4.63	4.24
Combine	5-foot	1.0	.95	.84	73	.69	.61
Combine, self-propelled	10-foot	1.0	.60	.60	9	.05	---
Combine, contract	6-foot	1.0	.74	.66	18	.13	.12
Haul from combine, trucks	1½-ton	1.0	.86	.86	100	.86	---
Total harvest						1.73	.73
Total 2/						6.36	4.97

1/ Most of the inoculating of seed is included in planting operations.

2/ In addition horse work averaged 0.24 hour an acre; truck use averaged 0.86 hour an acre, and self-propelled combine 0.05 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-H1, 1950

The data presented here are based on 44 soybean-producing farms in southern Iowa, northern Missouri, and west central Illinois. These farms are in type-of-farming area V-H1, an area in which hog-beef raising farms are the most important type. Soybeans are produced mainly on river bottom land and on some of the more productive of the upland soils.

The farms surveyed averaged 275 total acres. In 1950, 179 acres were in crops, including 55 in soybeans. In 1950, the average yield of soybeans on these farms was 22 bushels an acre.

Tractors provide most of the power used on farms in this area. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.2	3.20	3.84	100	3.84
Inoculant	Bu.	1.2	.10	.12	42	.05
Manure	Ton	9	2/ 2.00	18.00	2	.36
Mixed fertilizer	Cwt.	1.65	2.45	4.04	5	.20
Limestone	Ton	3.0	3.60	10.80	9	.97
Total materials						5.42

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.70	4.70	17	.80
Hauling	Bu.	22	.10	2.20	30	.66
Total contract work						1.46

1/ Approximately 31 percent of the farmers in this area purchased soybean seed.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-H1, southern Iowa, northern Missouri, and west central Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75 bu.	1.0	4.60	2.30	2	0.09	0.05
Plow, moldboard	3-14 inch	1.0	.88	.88	20	.18	.18
Plow, moldboard	2-14 inch	1.0	1.25	1.22	42	.52	.51
Disk, offset	7-foot	1.0	.50	.50	38	.19	.19
Disk, tandem	7-foot	1.9	.47	.45	65	.58	.56
Disk and harrow	7-foot	1.6	.51	.48	66	.54	.51
Harrow, spiketooth	15-foot	1.6	.25	.24	53	.21	.20
Drill	8-foot	1.0	.55	.41	53	.29	.22
Plant	4-row	1.0	.45	.33	15	.07	.05
Plant	2-row	1.0	.72	.55	25	.18	.14
Plant, horses	2-row	1.0	.94	1.62	7	.07	---
Rotary hoe	15-foot	1.4	.47	.43	27	.18	.16
Cultivate	4-row	1.5	.34	.32	11	.06	.05
Cultivate	2-row	1.5	.63	.58	35	.33	.30
Cultivate, horses	1-row	2.0	1.65	3.15	1	.03	---
Total preharvest						3.52	3.12
Combine	6-foot	1.0	.97	.93	83	.81	.77
Combine, contract	6-foot	1.0	.97	.93	17	.16	.16
Haul to barn	---	1.0	.40	.20	17	.07	.03
Haul to barn, truck	1½ ton	1.0	.40	.20	2	.01	---
Haul to elevator	---	1.0	.60	.30	4	.02	.01
Haul to elevator, truck	1½ ton	1.0	.60	.30	47	.28	---
Haul, truck, contract	1½ ton	1.0	.60	.30	30	.18	---
Total harvest						1.53	.97
Total 1/						5.05	4.09

1/ In addition, horses were used an average of 0.17 hour an acre and trucks, 0.23 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA VI-G2, 1950

The data presented here are based on a survey of approximately 36 farms in 1951 producing soybeans in the Ozark Mountain and Border area in southeastern Missouri and southern Illinois. These farms are in type-of-farming area VI-G2, a dairy, livestock, and poultry area.

The farms surveyed averaged 264 total acres. In 1950, 174 acres were in crops, including 41 in soybeans. The average yield of soybeans was approximately 23 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 27; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.3	3.15	4.10	100	4.10
Inoculant	Bu.	1.3	.11	.14	28	.04
Manure	Ton	5	2/ 2.00	10.00	9	.90
Mixed fertilizer	Cwt.	2.00	2.20	4.40	5	.22
Phosphate fertilizer (45%)	Cwt.	2.00	3.00	6.00	5	.30
Phosphate fertilizer	Cwt.	9.35	.90	8.42	4	.34
Lime	Ton	3.0	3.30	9.90	14	1.39
Total materials						7.29

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.00	5.00	12	.60
Hauling grain	Bu.	23	.08	1.84	7	.13
Total contract work						.73

1/ Approximately 31 percent of the farmers in this area purchased soybean seed.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area VI-G2, southeastern Missouri and southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, loader-sp.	75-bu.	1.0	1.68	1.68	1	0.02	0.02
Apply manure, spreader	75-bu.	1.0	2.40	1.20	5	.12	.06
Apply manure, horses-sp.	75-bu.	1.0	2.88	5.76	3	.09	---
Spread lime	8-foot	1.0	.98	.60	8	.08	.05
Fertilize, drill	8-foot	1.0	.68	.44	13	.09	.06
Fertilize, drill, horses	8-foot	1.0	.89	1.20	1	.01	---
Plow, moldboard	3-14 inch	1.0	.85	.81	13	.11	.11
Plow, moldboard	2-14 inch	1.0	1.23	1.18	80	.98	.94
Field cultivate	8-foot	1.7	.52	.47	1	.01	.01
Disk, tandem	7-foot	2.0	.47	.45	73	.69	.66
Disk and harrow	7-foot	1.2	.51	.48	19	.12	.11
Harrow, spiketooth	15-foot	1.9	.25	.24	60	.28	.27
Drill	8-foot	1.0	.55	.41	78	.43	.32
Drill, horses	6-foot	1.0	1.10	2.10	9	.10	---
Plant	2-row	1.0	.60	.50	10	.06	.05
Plant, horses	2-row	1.0	.89	1.58	3	.03	---
Cultivate	2-row	2.0	.63	.58	13	.16	.15
Total preharvest						3.38	2.81
Combine	6-foot	1.0	.97	.93	88	.85	.82
Combine, contract	6-foot	1.0	.97	.93	12	.12	.11
Haul from combine	---	1.0	.60	1.20	24	.14	.29
Haul from combine, truck	1½-ton	1.0	.50	.25	69	.34	---
Haul grain, truck, contract	1½-ton	1.0	.50	.25	7	.04	---
Total harvest						1.49	1.22
Total 1/						4.87	4.03

1/ In addition horse work averaged 0.42 hour an acre and truck use 0.19 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA VI-G3, 1950

The data presented here are based on a survey of approximately 36 farms in 1951 producing soybeans in the gray lands of southern Illinois. These farms are in type-of-farming area VI-G3, a dairy, livestock, and poultry area.

The farms surveyed averaged 228 total acres. In 1950, 178 acres were in crops, including 71 acres in soybeans. The average yield of soybeans was approximately 16 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.0	3.40	3.40	100	3.04
Inoculant	Bu.	1.0	.09	.09	72	.06
Manure	Ton	5	2/ 2.00	10.00	2	.20
Mixed fertilizer	Cwt.	1.85	1.80	3.33	13	.43
Lime	Ton	3.6	3.40	12.24	7	.86
Total materials						4.59

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.70	4.70	6	.28
Hauling	Bu.	16	.09	1.44	14	.20
Total contract work						.48

[1] Approximately 29 percent of the farmers in this area purchase soybean seed.
[2] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area VI-G3, southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.55	1.28	2	0.05	0.03
Plow, moldboard	3-14 inch	1.0	.81	.78	44	.36	.34
Plow, moldboard	2-14 inch	1.0	1.20	1.15	56	.67	.64
Disk, tandem	7-foot	1.0	.44	.42	88	.81	.78
Disk and harrow	7-foot	1.0	.47	.45	16	.12	.12
Harrow, spiketooth	15-foot	1.0	.23	.22	88	.32	.31
Drill	8-foot	1.0	.55	.41	31	.17	.13
Plant	2-row	1.0	.78	.57	33	.26	.19
Plant	4-row	1.0	.52	.36	24	.12	.09
Plant, horses	2-row	1.0	1.00	1.70	12	.12	---
Weed, rotary hoe	12-foot	1.0	.47	.43	63	.41	.38
Cultivate	2-row	1.0	.63	.58	65	.66	.60
Cultivate, horses	1-row	1.0	1.65	3.15	2	.04	---
Total preharvest						4.11	3.61
Combine	6-foot	1.0	.97	.93	94	.91	.87
Combine, contract	6-foot	1.0	.97	.93	6	.06	.06
Haul to elevator	---	1.0	.60	.30	19	.11	.06
Haul to elevator, truck	1½-ton	1.0	.60	.30	43	.26	---
Haul to barn	---	1.0	.40	.20	5	.02	.01
Haul to barn, truck	1½-ton	1.0	.40	.20	19	.08	---
Haul, truck, contract	1½-ton	1.0	.60	.30	14	.08	---
Total harvest						1.52	1.00
Total 1/						5.63	4.61

1/ In addition horse work averaged 0.27 hour an acre and truck use 0.21 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey of approximately 30 farms growing soybeans in 1950, in southeastern Ohio. These farms are located in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley.

The farms surveyed averaged 176 total acres. In 1949, 134 acres were in crops, including 20 in soybeans. The average yield of soybeans was 24 bushels an acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 27; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed [1]	Bu.	2.0	3.25	6.50	100	6.50
Manure	Ton	7	[2]2.00	14.00	21	2.94
Mixed fertilizer	Cwt.	2.10	2.20	4.62	25	1.16
Limestone	Ton	2.8	3.80	10.64	32	3.40
Sacks	No.	13	.13	1.69	7	.12
Total materials						14.12

CONTRACT WORK HIRED

Combining	Acre	1.0	5.10	5.10	15	.76
Total contract work						.76

[1] Approximately 48 percent of the farmers in this area purchase soybean seed.

[2] Estimated.

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.44	0.90	21	0.72	0.19
Spread lime, truck	---	1.0	.39	.36	26	.10	---
Plow, moldboard	3-14 inch	1.0	1.21	1.16	32	.39	.37
Plow, moldboard	2-14 inch	1.0	1.31	1.25	46	.60	.58
Plow, moldboard	2-12 inch	1.0	1.43	1.37	22	.31	.30
Disk, tandem	7-foot	2.1	.46	.44	61	.59	.56
Harrow, spiketooth	8-foot	1.2	.45	.41	53	.29	.26
Disk and harrow	7-foot	1.7	.45	.43	49	.37	.36
Drill	8-foot	1.0	.43	.39	21	.09	.08
Drill	6-foot	1.0	.78	.60	68	.53	.41
Drill, horses	5-foot	1.0	1.37	2.09	11	.15	---
Weed, rotary hoe	9-foot	1.8	.37	.35	20	.13	.13
Total preharvest						4.27	3.24
Combine	5-foot	1.0	1.71	.99	85	1.45	.84
Combine, contract	6-foot	1.0	1.01	.82	15	.15	.12
Haul from combine, truck	1½-ton	1.0	.65	.31	69	.45	---
Haul from combine	---	1.0	.87	.41	31	.27	.13
Total harvest						2.32	1.09
Total 1/						6.59	4.33

1/ In addition horse work averaged 0.23 hour an acre and truck use averaged 0.31 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA IV-A2, 1950

The data presented here are based on a survey of approximately 26 farms in 1951, in eastern Wisconsin and northeastern Illinois. These farms are in type-of-farming area IV-A2, a specialized dairy area in the Chicago milk-shed.

The farms surveyed averaged 164 total acres. In 1950, 137 acres were in crops, including 6 in spring wheat. The average yield of spring wheat was approximately 34 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was about 20.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.5	2.25	3.37	65	2.19
Purchased seed	do.	1.5	3.30	4.95	35	1.73
Mixed fertilizer	Cwt.	1.65	2.75	4.54	65	2.95
Spray (2-4-D)	Gal.	.1	2.25	.22	11	.02
Twine	Lb.	4.2	.26	1.09	36	.39
Total						7.28

1/ No contract work was reported on the farms surveyed in this area.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, area IV-A2, eastern Wisconsin and northeastern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	80-bu.	1.0	5.79	2.63	30	1.74	0.79
Apply manure, horses, sp.	75-bu.	1.0	11.00	10.00	4	.44	---
Plow, moldboard	2-14 in.	1.0	1.36	1.30	59	.80	.77
Plow, moldboard	3-14 in.	1.0	.97	.92	39	.38	.36
Harrow, spiketooth	15-foot	1.2	.20	.19	53	.13	.12
Harrow, springtooth	12-foot	2.2	.36	.35	71	.56	.55
Field cultivate	8-foot	4.2	.51	.48	15	.32	.30
Weed	10-foot	1.0	.36	.35	11	.04	.04
Spray	33-foot	1.0	.08	.07	11	.01	.01
Fertilize, drill	10-foot	1.0	.34	.33	8	.03	.03
Seed, drill	8-foot	1.0	.55	.51	96	.53	.49
Seed by hand	---	1.0	.19	---	4	.01	---
Harrow, spiketooth	20-foot	1.0	.18	.17	29	.05	.05
Cultipack	14-foot	1.0	.26	.24	56	.15	.13
Total preharvest						5.19	3.64
Combine	6-foot	1.0	.79	.73	64	.51	.47
Haul from combine, truck	---	1.0	.47	.27	56	.26	---
Haul from combine	---	1.0	1.15	.60	8	.09	.05
Bind	7-foot	1.0	1.07	.65	36	.39	.23
Shock by hand	---	1.0	1.02	---	36	.37	---
Haul bundles	---	1.0	4.96	2.06	20	.99	.41
Haul bundles, horses	---	1.0	1.69	2.11	9	.15	---
Thresh	26-inch	1.0	2.76	1.06	11	.30	.12
Thresh and store	26-inch	1.0	1.35	.76	25	.34	.19
Haul grain	---	1.0	1.41	.72	11	.16	.08
Total harvest						3.56	1.55
Total 2/						8.75	5.19

1/ In addition, horse work averaged 0.59 hour an acre and truck use averaged 0.15 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 35 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 388 total acres. In 1950, 228 acres were in crops, including 23 in spring wheat. The average yield of spring wheat was approximately 19 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	1.5	2.35	3.52	85	2.99
Purchased seed	Bu.	1.5	2.60	3.90	15	.58
Manure	Ton	16	1/ 2.00	32.00	8	2.56
Mixed fertilizer	Cwt.	1.00	3.25	3.25	8	.26
Spray	Gal.	.1	5.45	.54	21	.11
Twine	Lb.	3.0	.22	.66	34	.22
Total materials						6.72

CONTRACT WORK HIRED

Threshing	Bu.	19	.07	1.33	4	.05
Hauling	Bu.	19	.03	.57	7	.04
Total contract work						.09

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	90-bu.	1.0	5.00	2.29	8	0.40	0.18
Plow, moldboard	2-14 in.	1.0	1.13	1.08	33	.37	.36
Plow, moldboard	3-14 in.	1.0	.73	.69	43	.31	.30
Plow, moldboard	4-14 in.	1.0	.43	.41	23	.10	.09
Field cultivate	10-foot	2.0	.29	.27	53	.31	.29
Disk, tandem	9-foot	1.7	.35	.34	62	.37	.36
Harrow, springtooth	12-foot	1.0	.32	.30	39	.12	.12
Harrow, spiketooth	25-foot	1.4	.15	.15	69	.14	.14
Seed, drill	10-foot	1.0	.44	.40	100	.44	.40
Harrow, spiketooth	25-foot	1.1	.14	.14	76	.11	.11
Spray	32-foot	1.0	.16	.14	21	.03	.03
Total preharvest						2.70	2.38
Swath	10-foot	1.0	.33	.32	60	.20	.19
Combine	7-foot	1.0	.82	.75	66	.54	.50
Haul from combine, truck	---	1.0	.66	.40	64	.42	---
Haul, contract, truck	---	1.0	.58	.32	2	.01	---
Elevate grain	---	1.0	.59	.32	29	.17	---
Bind	8-foot	1.0	.94	.56	34	.32	.19
Shock by hand	---	1.0	1.30	---	34	.44	---
Haul bundles	---	1.0	1.45	.86	17	.25	.15
Haul bundles, horses	---	1.0	1.51	2.06	17	.26	---
Thresh	24-inch	1.0	.46	.37	30	.14	.11
Thresh, contract	24-inch	1.0	.25	.22	4	.01	.01
Haul grain, truck	---	1.0	.41	.19	29	.12	---
Haul, contract, truck	---	1.0	.20	.12	5	.01	---
Total harvest						2.89	1.15
Total 1/						5.59	3.53

1/ In addition horse work averaged 0.35 hour an acre, truck use averaged 0.34 hour an acre and elevator motor averaged 0.09 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy and livestock area.

The farms surveyed averaged 227 total acres. In 1950, 151 acres were in crops, including 13 in spring wheat. The average yield of spring wheat was approximately 20 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 31; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	1.6	2.00	3.20	95	3.04
Purchased seed	Bu.	1.6	2.65	4.24	5	.21
Manure	Ton	14	1/ 2.00	28.00	13	3.64
Mixed fertilizer	Cwt.	.70	1.90	1.33	7	.09
Twine	Lb.	3.5	.23	.80	86	.69
Total materials						7.67

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	20	.07	1.40	21	.29
Total contract work						.29

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	5.79	2.63	13	0.75	0.34
Plow, moldboard	2-14 in.	1.0	1.21	1.16	52	.63	.60
Plow, moldboard	3-14 in.	1.0	.73	.69	43	.31	.30
Disk, tandem	8-foot	1.7	.37	.36	46	.29	.28
Disk, single	15-foot	2.2	.26	.25	50	.29	.28
Harrow, springtooth	12-foot	1.3	.40	.38	23	.12	.11
Harrow, spiketooth	20-foot	1.3	.13	.13	36	.06	.06
Seed, drill	10-foot	1.0	.48	.44	96	.46	.42
Seed, drill, horses	8-foot	1.0	1.53	2.93	4	.06	---
Harrow, spiketooth	20-foot	1.0	.12	.12	85	.10	.10
Total preharvest						3.07	2.49
Combine	9-foot	1.0	1.06	.69	14	.15	.10
Haul from combine, truck	---	1.0	.88	.60	14	.12	---
Bind	7-foot	1.0	1.23	.71	86	1.06	.61
Shock by hand	---	1.0	1.18	---	86	1.01	---
Haul bundles	---	1.0	1.24	.64	21	.26	.13
Haul bundles, horses	---	1.0	2.42	2.92	65	1.57	---
Thresh	26-inch	1.0	.84	.53	65	.55	.34
Thresh, contract	26-inch	1.0	.39	.29	21	.08	.06
Haul grain	---	1.0	.73	.31	30	.22	.09
Haul grain, truck	---	1.0	.53	.28	38	.20	---
Total harvest						5.22	1.33
Total 1/						8.34	3.82

1/ In addition, horse work averaged 2.02 hours an acre and truck use 0.19 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 42 farms producing spring wheat in 1949, in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F4, a livestock and cash-grain area in the northwestern Corn Belt Fringe.

The farms surveyed averaged 355 total acres per farm. In 1949, 285 acres were in crops, including 36 in spring wheat. The average yield of spring wheat was approximately 15 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.6	2.10	3.36	100	3.36
Ceresan	Bu.	1.6	.02	.03	40	.01
Manure	Ton	5	2/2.00	10.00	9	.90
Mixed fertilizer	Cwt.	1.85	2.80	5.18	4	.21
Spray (2,4-D)	Pint	1.0	.75	.75	18	.14
Twine	Lb.	1.9	.23	.44	35	.15
Total materials						4.77

CONTRACT WORK HIRED

Cleaning and treating seed	Bu.	1.6	.15	.24	41	.98
Spraying	Acre	1.0	.90	.90	5	.04
Threshing	Bu.	15	.09	1.35	20	.27
Hauling grain	Bu.	15	.05	.75	9	.07
Total contract work						1.36

1/ Approximately 31 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	----	1.0	2.21	1.44	9	0.20	0.13
Plow, moldboard	2-16 inch	1.0	1.16	1.10	19	.22	.21
Plow, moldboard	3-14 inch	1.0	.84	.80	74	.62	.59
Disk, single	15-foot	1.7	.23	.22	71	.28	.27
Field cultivate	9-foot	1.1	.36	.34	18	.07	.07
Harrow, spiketooth	26-foot	2.4	.12	.11	93	.27	.25
Clean and treat seed	----	1.0	.05	---	40	.02	---
Drill	11-foot	1.0	.31	.30	100	.31	.30
Harrow, spiketooth	26-foot	1.0	.12	.11	47	.06	.05
Spray	30-foot	1.0	.22	.18	18	.04	.03
Spray, contract	30-foot	1.0	.22	.18	5	.01	.01
Total preharvest						2.10	1.91
Windrow	12-foot	1.0	.33	.32	64	.21	.20
Combine	6-foot	1.0	.64	.58	36	.23	.21
Combine	10-foot	1.0	.48	.44	18	.09	.08
Combine, self-propelled	12-foot	1.0	.37	.34	11	.04	---
Haul from combine	----	1.0	.33	.33	19	.06	.06
Haul from combine, truck	----	1.0	.36	.36	46	.17	---
Bind	8-foot	1.0	.52	.47	19	.10	.09
Bind	10-foot	1.0	.44	.41	16	.07	.07
Shock	----	1.0	.68	---	35	.24	---
Haul bundles, horses	----	1.0	1.61	2.58	35	.56	---
Thresh	26-inch	1.0	.33	.26	15	.05	.04
Thresh, contract	26-inch	1.0	.33	.26	20	.07	.05
Haul grain	----	1.0	.36	.26	26	.09	.07
Haul grain, contract	----	1.0	.36	.26	9	.03	.02
Total harvest						2.01	.89
Total 1/						4.11	2.80

1/ In addition, horse work averaged 0.90 hour an acre, truck use 0.17 hour an acre, and self-propelled combine 0.04 hour an acre

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA I-A6, 1950

The data presented here are based on a survey of approximately 39 farms in 1951 producing winter wheat in the Ozark Plateau of southwestern Missouri. These farms are in type-of-farming area I-A6, a fruit and mixed farming area.

The farms surveyed averaged 302 total acres. In 1950, 221 acres were in crops, including 73 acres in winter wheat. The average yield of wheat was approximately 13 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	2.25	3.15	100	3.15
Manure	Ton	4	2/ 2.00	8.00	1	.08
Mixed fertilizer (3-12-12)	Cwt.	1.50	2.25	3.38	98	3.31
Lime	Ton	2.0	3.00	6.00	1	.06
Twine	Lb.	3.0	.24	.72	11	.08
Total materials						6.68

CONTRACT WORK HIRED

Combining	Acre	1.0	3.60	3.60	10	.36
Hauling grain	Bu.	13	.06	.78	23	.18
Threshing	Bu.	13	.07	.91	7	.06
Total contract work						.60

1/ Approximately 13 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area I-A6, southwestern Missouri, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	1.75	0.88	1	0.02	0.01
Fertilize, spreader	8-foot	1.0	.68	.44	9	.06	.04
Plow, moldboard	2-14 inch	1.0	1.23	1.18	53	.65	.63
Plow, moldboard	3-14 inch	1.0	.85	.81	38	.32	.31
Disk, tandem	7-foot	2.2	.46	.44	71	.72	.69
Disk, single	10-foot	1.7	.39	.37	8	.05	.05
Disk and harrow	10-foot	2.8	.48	.46	22	.30	.28
Harrow, springtooth	9-foot	2.0	.30	.28	27	.16	.15
Harrow, spiketooth	15-foot	1.5	.29	.27	47	.20	.19
Drill	8-foot	1.0	.58	.49	99	.57	.49
Drill, horses	6-foot	1.0	1.10	2.10	1	.01	---
Total preharvest						3.06	2.84
Combine	6-foot	1.0	1.02	.84	79	.81	.66
Combine, contract	6-foot	1.0	1.02	.84	10	.10	.08
Haul grain, truck	1½-ton	1.0	.50	.24	77	.38	---
Haul, truck, contract	1½-ton	1.0	.50	.24	23	.12	---
Bind	8-foot	1.0	1.38	.71	11	.15	.08
Shock by hand	---	1.0	1.10	---	11	.12	---
Haul bundles	---	1.0	3.50	.63	2	.07	.01
Haul bundles, horses	---	1.0	3.50	3.30	9	.32	---
Thresh	28-inch	1.0	.74	.35	4	.03	.01
Thresh, contract	28-inch	1.0	.74	.35	7	.05	.02
Total harvest						2.15	.86
Total 1/						5.21	3.70

1/ In addition horse work averaged 0.32 hour an acre and truck use 0.24 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA I-B5, 1950

The data presented here are based on a survey of approximately 30 farms in 1951, in western Michigan. These farms are in type-of-farming area I-B5, a fruit, truck and mixed farming area on the eastern shore of Lake Michigan.

The farms surveyed averaged 131 total acres. In 1950, 105 acres were in crops, including 21 in wheat. The average yield of winter wheat was approximately 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 31; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.9	2.30	4.37	55	2.40
Purchased seed	Bu.	1.9	2.40	4.56	45	2.05
Manure	Ton	12	1/ 2.00	24.00	33	7.92
Mixed fertilizer	Cwt.	2.05	5.30	10.86	80	8.69
Limestone	Ton	1.9	3.20	6.08	4	.24
Marl	Yd.	9.3	1.60	14.88	5	.74
Twine	Lb.	4.0	.25	1.00	15	.15
Total materials						22.19

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combine	Acre	1.0	4.95	4.95	20	.99
Total contract work						.99

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area I-B5, western Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	90-bu.	1.0	4.55	1.73	33	1.50	0.57
Plow, moldboard	2-14 in.	1.0	1.31	1.25	100	1.31	1.25
Disk, tandem	7-foot	1.6	.44	.42	63	.44	.42
Harrow, springtooth	12-foot	2.4	.33	.32	93	.73	.72
Cultipack	8-foot	1.2	.44	.42	64	.34	.32
Seed, drill	8-foot	1.0	.65	.59	100	.65	.59
Total preharvest						4.97	3.87
Combine	6-foot	1.0	1.15	.96	65	.75	.62
Combine, contract	6-foot	1.0	1.00	.66	20	.20	.13
Haul from combine	---	1.0	1.32	.56	64	.84	.36
Haul from combine, truck	---	1.0	.63	.33	21	.13	---
Bind	7-foot	1.0	1.13	.74	15	.17	.11
Shock	---	1.0	1.34	---	15	.20	---
Haul bundles	---	1.0	3.20	1.11	15	.48	.17
Thresh	26-in.	1.0	1.91	.94	15	.29	.14
Haul from thresher	---	1.0	4.22	.48	6	.25	.03
Total harvest						3.31	1.56
Total 1/						8.28	5.43

1/ In addition, truck use averaged 0.07 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA IV-B1, 1950

The data presented here are based on a survey of approximately 19 farms in 1951, in central Minnesota. These farms are in type-of-farming area IV-B1, a dairy and livestock area in the Minnesota cut-over fringe.

The farms surveyed averaged 220 total acres. In 1950, 127 acres were in crops, including 7 in winter wheat. The average yield of winter wheat was approximately 18 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 21.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.7	1.75	2.98	48	1.43
Purchased seed	do.	1.7	2.00	3.40	52	1.77
Manure	Ton	13	2/ 2.00	26.00	20	5.20
Mixed fertilizer	Cwt.	2.00	2.40	4.80	8	.38
Twine	Lb.	2.9	.23	.67	80	.54
Total materials						9.32

1/ No contract work was reported on farms surveyed in this area.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area IV-B1, central Minnesota, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms		
			Man	Power		Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	4.88	2.22	12	0.59	0.27	---
Apply manure, horses, sp.	75-bu.	1.0	9.16	10.00	8	.73	---	.80
Fertilize, spreader	8-foot	1.0	.58	.55	12	.07	.07	---
Plow, moldboard	2-14 in.	1.0	1.08	1.03	93	1.00	.96	---
Plow, moldboard, horses	1-14 in.	1.0	2.62	5.24	2	.05	---	.10
Disk, tandem	7-foot	1.8	.47	.45	54	.46	.44	---
Harrow, spiketooth	20-foot	1.5	.17	.16	82	.21	.20	---
Harrow, springtooth, h.	16-foot	2.5	.41	1.02	14	.14	---	.36
Harrow, springtooth	12-foot	1.0	.44	.42	11	.05	.05	---
Seed, drill	8-foot	1.0	.60	.55	76	.46	.42	---
Seed, drill, horses	6-foot	1.0	1.29	3.08	24	.31	---	.74
Total preharvest						4.07	2.41	2.00
Combine	6-foot	1.0	.66	.61	20	.13	.12	---
Haul from combine	---	1.0	.68	.47	20	.14	.09	---
Bind	7-foot	1.0	1.14	1.04	66	.75	.69	---
Bind, horses	5-foot	1.0	1.85	4.42	14	.26	---	.62
Shock	---	1.0	1.47	---	80	1.18	---	---
Haul bundles, horses	---	1.0	2.89	3.02	80	2.31	---	2.42
Thresh	---	1.0	.93	.41	80	.74	.33	---
Total harvest						5.51	1.23	3.04
Total						9.58	3.64	5.04

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA IV-B2, 1950

The data presented here are based on a survey of approximately 26 farms in 1951, in southeastern Minnesota and west central Wisconsin. These farms are in type-of-farming area IV-B2, a dairy and livestock area.

The farms surveyed averaged 195 total acres. In 1950, 137 acres were in crops, including 11 in winter wheat. The average yield of winter wheat was approximately 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 29; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.7	2.00	3.40	100	3.40
Manure	Ton	17	1/ 2.00	34.00	52	17.68
Twine	Lb.	4.5	.23	1.04	76	.79
Total materials						21.87

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Threshing	Bu.	32	.04	1.28	20	.26
Total contract work						.26

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area IV-B2, southeastern Minnesota and west central Wisconsin, 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	5.07	1.92	52	2.64	1.00
Plow, moldboard	2-14 in.	1.0	1.20	1.14	94	1.13	1.07
Disk, tandem	8-foot	1.5	.37	.36	48	.27	.26
Disk, single	15-foot	1.7	.30	.28	42	.21	.20
Harrow, spiketooth	20-foot	1.4	.13	.13	90	.16	.16
Seed, drill	9-foot	1.0	.53	.48	100	.53	.48
Harrow, spiketooth	20-foot	1.0	.14	.14	91	.13	.13
Total preharvest						5.07	3.30
Windrow	7-foot	1.0	.55	.53	4	.02	.02
Combine	6-foot	1.0	.96	.88	24	.23	.21
Haul from combine	---	1.0	.88	.38	24	.21	.09
Bind	8-foot	1.0	1.13	.79	76	.86	.60
Shock by hand	---	1.0	1.39	---	76	1.06	---
Haul bundles	---	1.0	1.39	.68	76	1.06	.52
Thresh	28-inch	1.0	.51	.37	56	.29	.21
Thresh, contract	28-inch	1.0	.31	.28	20	.06	.06
Haul grain	---	1.0	.28	.19	43	.12	.08
Haul grain, truck	---	1.0	.45	.31	33	.15	---
Total harvest						4.06	1.79
Total 1/						9.13	5.09

1/ In addition, truck use averaged 0.10 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA IV-D1, 1949

The data presented here are based on a survey of approximately 30 farms in 1950, in east central Michigan. These farms are in type-of-farming area IV-D1, a dairy and cash crop area.

The farms surveyed averaged 144 total acres. In 1949, 90 acres were in crops, including 17 in wheat. The average yield of wheat was 30 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.0	2.50	5.00	100	5.00
Manure	Ton	8	2/ 2.00	16.00	16	2.56
Mixed fertilizer	Cwt.	2.10	2.20	4.62	96	4.44
Total materials						12.00

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.65	4.65	46	2.14
Hauling	Bu.	30	.05	1.50	12	.18
Total contract work						2.32

1/ Approximately 37 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area IV-D1, east central Michigan, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure	---	1.0	3.76	1.32	16	0.60	0.21
Plow, moldboard	2-14 inch	1.0	1.53	1.46	79	1.21	1.15
Disk, tandem	8-foot	2.4	.55	.52	51	.67	.64
Harrow, springtooth	9-foot	2.8	.41	.38	72	.83	.76
Cultipack	9-foot	1.1	.44	.40	30	.14	.13
Disk and cultipack	8-foot	4.0	.58	.52	8	.19	.17
Harrow and cultipack	9-foot	3.0	.39	.36	15	.18	.16
Disk, cultipack and harrow	---	1.0	.29	.26	5	.01	.01
Seed, drill	8-foot	1.0	.63	.58	100	.63	.58
Harrow, spiketooth	9-foot	1.0	.66	.60	3	.02	.02
Weed by hand	---	1.0	2.28	---	4	.09	---
Total preharvest						4.57	3.83
Combine	6-foot	1.0	1.30	1.00	54	.70	.54
Combine, contract	6-foot	1.0	1.40	.81	46	.64	.37
Haul from combine	---	1.0	1.11	.48	88	.98	.42
Haul, contract, truck	1½ ton	1.0	1.02	.58	12	.12	---
Total harvest						2.44	1.33
Total 1/						7.01	5.16

1/ In addition truck use averaged 0.07 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA IV-F4, 1949

The data presented here are based on a survey made on approximately 37 farms in 1950, in northeastern Ohio and northwestern Pennsylvania. These farms are in type-of-farming area IV-F4, a dairy- and general-farming area on the Lake Erie border.

The farms surveyed averaged 141 total acres. In 1949, 93 acres were in crops, including 21 in wheat. The average yield of wheat was 35 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating ranged from 10 to 29; the most common was 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.5	2.55	6.38	100	6.38
Manure	Ton	9	2/2.00	18.00	25	4.50
Mixed fertilizer	Cwt.	2.80	2.25	6.30	99	6.24
Lime	Ton	1.9	3.85	7.32	44	3.22
Twine	Lb.	2.5	.26	.65	31	.20
Sacks	No.	22	.10	2.20	4	.09
Total materials						20.63

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.00	5.00	14	.70
Threshing	Bu.	35.0	.08	2.80	11	.31
Total contract work						1.01

1/ Approximately 18 percent of the farmers in this area purchased seed wheat.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting wheat, area IV-F4, northeastern Ohio and northwestern Pennsylvania, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	4.02	1.31	22	0.88	0.29	---
Apply manure, horses-sp.	65 bu.	1.0	4.56	6.38	3	.14	---	.19
Spread lime	---	1.0	.61	.56	38	.23	.21	---
Plow, moldboard	2-14 inch	1.0	1.53	1.46	76	1.16	1.11	---
Plow, moldboard	2-12 inch	1.0	2.00	1.91	7	.14	.13	---
Plow, moldboard, horses	1-12 inch	1.0	4.74	9.48	7	.33	---	.66
Disk, tandem	7-foot	2.2	.48	.46	88	.93	.89	---
Disk, tandem, horses	7-foot	1.0	1.69	5.91	4	.07	---	.24
Harrow, spiketooth	9-foot	1.6	.45	.41	64	.46	.42	---
Harrow, spiketooth, h.	9-foot	2.8	1.31	3.28	7	.26	---	.64
Clean seed	---	1.0	.42	---	2	.01	---	---
Seed, drill	6-foot	1.0	.93	.65	75	.70	.49	---
Seed, drill, horses	6-foot	1.0	1.12	2.13	24	.27	---	.51
Total preharvest						5.58	3.54	2.24
Combine	6-foot	1.0	1.81	.92	55	1.00	.51	---
Combine, contract	6-foot	1.0	1.13	.92	14	.16	.13	---
Haul from combine	---	1.0	1.03	.39	69	.71	.27	---
Bind	7-foot	1.0	1.68	.82	25	.42	.20	---
Bind, horses	7-foot	1.0	1.50	3.43	6	.09	---	.21
Shock by hand	---	1.0	1.48	---	31	.46	---	---
Haul bundles	---	1.0	5.75	.99	19	1.09	.19	---
Haul bundles, horses	---	1.0	4.92	3.83	12	.59	---	.46
Thresh	22-inch	1.0	1.88	.73	20	.38	.15	---
Thresh, contract	22-inch	1.0	1.88	.73	11	.21	.08	---
Total harvest						5.11	1.53	.67
Total						10.69	5.07	2.91

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-A1, 1948

The data presented here are taken from a survey made in 1950 by the Department of Agricultural Economics of the University of Nebraska of approximately 98 farms producing winter wheat in southeastern Nebraska. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area.

In 1949, 40 acres of winter wheat were harvested per farm. The average yield of winter wheat was approximately 15 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was 19.

Materials used and contract work hired, 1948

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed	Bu.	1.4	2.35	3.29	100	3.29
Twine	Lb.	3.5	.25	.88	5	.04
Total materials						3.33

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.65	4.65	22	1.02
Hauling	Bu.	15	.03	.45	21	.09
Total contract work						1.11

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-A1, southeastern Nebraska, 1948

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	3-14 inch	1.0	0.91	0.87	22	0.20	0.19
Plow, moldboard	2-14 inch	1.0	1.38	1.31	67	.92	.88
Disk, tandem	10-foot	1.2	.47	.45	16	.09	.09
Disk, single	12-foot	2.0	.33	.33	80	.53	.51
Harrow, spiketooth	18-foot	1.7	.20	.19	77	.26	.25
Seed, drill	10-foot	1.0	.53	.48	100	.53	.48
Total preharvest						2.53	2.40
Windrow	8-foot	1.0	.68	.65	6	.04	.04
Combine	6-foot	1.0	.98	.90	73	.72	.66
Combine, contract	6-foot	1.0	.98	.90	22	.22	.20
Haul from combine, truck	1½-ton	1.0	.27	.26	74	.20	---
Haul, truck, contract	1½-ton	1.0	.27	.26	21	.06	---
Bind	8-foot	1.0	.70	.64	5	.04	.03
Shock by hand	---	1.0	1.17	---	5	.06	---
Haul bundles	---	1.0	1.57	.50	3	.05	.02
Haul bundles, horses	---	1.0	2.17	.91	2	.04	---
Thresh, contract	24-inch	1.0	.54	.50	5	.03	.02
Total harvest						1.46	.97
Total 1/						3.99	3.37

1/ In addition horse work averaged 0.02 hour an acre and truck use 0.24.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-D1, 1949

The data presented here are based on a survey of approximately 28 farms in 1950, in southern Michigan, northwestern Ohio, and northeastern Indiana. These farms are in type-of-farming area V-D1, a livestock, dairy, soybean, and cash-grain area on the northeastern fringe of the Corn Belt.

The farms surveyed averaged 144 total acres. In 1949, 121 acres were in crops, including 22 in wheat. The average yield of wheat was approximately 29 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 37; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.9	1.90	3.61	100	3.61
Manure	Ton	6	2.00	12.00	14	1.68
Mixed fertilizer	Cwt.	2.30	2.10	4.83	100	4.83
Total materials						10.12

CONTRACT WORK HIRED

Combining	Acre	1.0	4.00	4.00	16	.64
Hauling	Bu.	29	.06	1.74	9	.16
Total contract work						.80

1/ Approximately 12 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-D1, southern Michigan, northwestern Ohio and northeastern Indiana, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	---	1.0	3.30	1.50	14	0.46	0.21
Plow, moldboard	2-14 inch	1.0	1.23	1.18	84	1.03	.99
Disk, tandem	7-foot	2.1	.51	.48	72	.77	.72
Harrow, springtooth	9-foot	1.9	.37	.34	44	.31	.29
Cultipack	9-foot	1.3	.49	.45	26	.17	.15
Harrow and cultipack	9-foot	2.0	.41	.38	8	.07	.06
Disk and cultipack	7-foot	2.8	.33	.30	19	.17	.16
Seed, drill	8-foot	1.0	.60	.55	100	.60	.55
Total preharvest						3.58	3.13
Combine	6-foot	1.0	.96	.78	84	.81	.66
Combine, contract	6-foot	1.0	.90	.74	16	.14	.12
Haul from combine	---	1.0	.77	.70	48	.37	.34
Haul from combine, truck	---	1.0	.54	.33	43	.23	---
Haul, contract, truck	---	1.0	.65	.37	9	.06	---
Total harvest						1.61	1.12
Total 1/						5.19	4.25

1/ In addition, truck use averaged 0.18 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 41 farms growing wheat in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 354 total acres. In 1949, 235 acres were in crops, including 59 in wheat. The average yield of wheat was 23 bushels an acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was 21.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	1.90	2.66	100	2.66
Manure	Ton	5	2/2.00	10.00	6	.60
Mixed fertilizer	Cwt.	1.50	2.25	3.38	61	2.06
Nitrate fertilizer	Cwt.	1.20	3.55	4.26	16	.68
Phosphate fertilizer	Cwt.	.90	3.40	3.06	14	.43
Total materials						6.43

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Spraying	Acre	1.0	2.00	2.00	6	.12
Combining	Acre	1.0	3.55	3.55	15	.53
Total contract work						.65

1/ Approximately 22 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-G1, western Missouri and eastern Kansas, 1949

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreaders	60-bu.	1.0	3.01	1.00	6	0.18	0.06
Plow, moldboard	2-14 inch	1.0	1.17	1.11	87	1.02	.97
Disk, tandem	7-foot	1.9	.44	.42	80	.67	.64
Disk, single	15-foot	1.9	.20	.19	11	.04	.04
Harrow, spiketooth	15-foot	1.9	.22	.20	86	.36	.33
Disk and harrow	7-foot	1.7	.49	.47	11	.09	.09
Field cultivate	10-foot	1.2	.31	.30	8	.03	.03
Fertilize, drill	9-foot	1.0	.44	.41	14	.06	.06
Seed, drill	11-foot	1.0	.42	.40	100	.42	.40
Spray, contract, airplane	---	1.0	---	---	6	---	---
Total preharvest						2.87	2.62
Combine	6-foot	1.0	.81	.66	71	.58	.47
Combine, self-propelled	14-foot	1.0	.59	.59	14	.08	---
Combine, contract	6-foot	1.0	.76	.54	15	.11	.08
Haul from combine, truck	$1\frac{1}{2}$-ton	1.0	.66	.66	100	.66	---
Total harvest						1.43	.55
Total 1/						4.30	3.17

1/ In addition truck use averaged 0.66 hour an acre and self-propelled combine use averaged 0.08 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-H1, 1950

The data presented here are based on a survey of approximately 38 farms in 1951 producing winter wheat in southern Iowa, northern Missouri, and west central Illinois. These farms are in type-of-farming area V-H1, a livestock and pasture area.

The farms surveyed averaged 326 total acres. In 1950, 201 acres were in crops, including 31 acres in winter wheat. The average yield of wheat was approximately 21 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 27; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	2.18	3.05	100	3.05
Manure	Ton	5	2/ 2.00	10.00	4	.40
Fertilizer (4-12-4)	Cwt.	1.55	2.20	3.41	43	1.47
Limestone	Ton	2.1	3.60	7.56	9	.68
Twine	Lb.	1.7	.24	.41	7	.03
Total materials						5.63
CONTRACT WORK HIRED						
Combining	Acre	1.0	4.50	4.50	17	.76
Threshing	Bu.	21	.08	1.68	7	.12
Hauling	Bu.	21	.07	1.47	28	.41
Total contract work						1.29

1/ Approximately 34 percent of the farmers in this area purchased seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-H1, southern Iowa, northern **Missouri**, and west central Illinois. 1950

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.50	1.25	4	0.10	0.05
Plow, moldboard	3-14 inch	1.0	.88	.84	23	.20	.19
Plow, moldboard	2-14 inch	1.0	1.26	1.22	60	.76	.73
Disk, tandem	8-foot	1.8	.47	.45	67	.57	.54
Disk and harrow	8-foot	1.6	.47	.45	16	.12	.12
Disk, single	12-foot	2.0	.33	.32	17	.11	.11
Harrow, spiketooth	15-foot	1.5	.25	.24	65	.24	.23
Seed, drill	8-foot	1.0	.58	.49	97	.56	.48
Seed, drill, horses	6-foot	1.0	1.10	2.10	3	.03	---
Total preharvest						2.69	2.45
Combine	5-foot	1.0	1.02	.84	76	.76	.64
Combine, contract	5-foot	1.0	1.02	.84	17	.17	.14
Haul from combine	---	1.0	.50	.25	68	.34	.17
Haul, truck, contract	1½-ton	1.0	.60	.30	25	.15	---
Bind	7-foot	1.0	1.38	.71	7	.10	.05
Shock	---	1.0	1.10	---	7	.08	---
Haul bundles	---	1.0	3.50	.63	1	.04	.01
Haul bundles, horses	---	1.0	3.50	3.30	6	.21	---
Thresh, contract	28-inch	1.0	.74	.35	7	.05	.02
Haul grain	---	1.0	.42	.20	4	.02	.01
Haul, truck, contract	---	1.0	.60	.30	3	.02	---
Total harvest						1.94	1.04
Total 1/						4.63	3.49

1/ In addition horse work averaged 0.26 hour an acre and truck use 0.09 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-H2, 1950

The data presented here are based on a survey made in 1951 of approximately 30 farms, in northwestern Indiana and southwestern Michigan. These farms are in type-of-farming area V-H2, a livestock and pasture area.

The farms surveyed averaged 150 total acres. In 1950, 128 acres were in crops, including 26 in winter wheat. The average yield of winter wheat was approximately 30 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 9 to 18; the most common was about 14.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home grown seed	Bu.	1.9	2.10	3.99	48	1.92
Purchased seed	Bu.	1.9	2.30	4.37	52	2.27
Mixed fertilizer	Cwt.	2.30	2.45	5.64	100	5.64
Manure	Ton	15	1/ 2.00	30.00	2	.60
Lime	Ton	1.3	3.25	4.22	37	1.56
Total materials						11.99

CONTRACT WORK HIRED

Combining	Acre	1.0	4.55	4.55	41	1.87
Total contract work						1.87

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-H2, northwestern Indiana and southwestern Michigan, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	90-bu.	1.0	2.20	0.50	2	0.04	0.01
Plow, moldboard	2-14 inch	1.0	1.28	1.22	96	1.23	1.17
Disk, tandem	8-foot	2.5	.45	.43	13	.15	.14
Harrow, springtooth	12-foot	3.0	.34	.33	100	1.02	.99
Cultipack	8-foot	1.1	.47	.45	76	.40	.38
Drill	8-foot	1.0	.65	.59	100	.65	.59
Cultipack	8-foot	1.0	.41	.39	27	.11	.11
Total preharvest						3.60	3.39
Combine	6-foot	1.0	1.34	1.23	59	.79	.73
Combine, contract	6-foot	1.0	.79	.73	41	.32	.30
Haul, store	---	1.0	1.49	.45	67	1.00	.30
Haul, store, trucks	---	1.0	2.02	.61	33	.67	---
Total harvest						2.78	1.33
Total 1/						6.38	4.72

1/ In addition, truck use averaged 0.20 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V1-G2, 1950

The data presented here are based on a survey of approximately 23 farms in 1951 producing winter wheat in the Ozark Mountain and Border area of southeastern Missouri and southern Illinois. These farms are in type-of-farming area V1-G2, a dairy, livestock, and poultry area.

The farms surveyed averaged 225 total acres. In 1950, 140 acres were in crops, including 36 acres in winter wheat. The average yield of winter wheat was approximately 19 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 27; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	2.45	3.43	100	3.43
Manure	Ton	5	2/ 2.00	10.00	9	.90
Mixed fertilizer	Cwt.	1.30	3.70	4.81	46	2.21
Phosphate fertilizer	Cwt.	1.50	1.75	2.62	7	.18
Lime	Ton	3	2.90	8.70	9	.78
Twine	Lb.	2.0	.25	.50	19	.10
Total materials						7.60

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	4.75	4.75	16	.76
Threshing	Bu.	19	.09	1.71	7	.12
Hauling	Bu.	19	.06	1.14	7	.08
Total contract work						.96

1/ Approximately 27 percent of the farmers in this area purchase seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area Vl-G2, southeastern Missouri and southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.50	1.25	9	0.22	0.11
Fertilize, spreader	9-foot	1.0	.68	.44	9	.06	.04
Plow, moldboard	3-14 inch	1.0	.85	.81	9	.08	.07
Plow, moldboard	2-14 inch	1.0	1.23	1.18	72	.89	.85
Disk, tandem	7-foot	1.8	.47	.45	90	.76	.73
Harrow	15-foot	1.3	.25	.24	41	.13	.13
Field cultivate	11-foot	1.0	.52	.47	3	.02	.01
Drill	9-foot	1.0	.53	.48	74	.39	.36
Drill, horses	6-foot	1.0	1.10	2.10	26	.29	---
Total preharvest						2.84	2.30
Combine	6-foot	1.0	1.02	.87	65	.66	.57
Combine, contract	6-foot	1.0	1.02	.87	16	.16	.14
Haul from combine	---	1.0	.48	.24	15	.07	.04
Haul from combine, truck	1½ ton	1.0	.48	.24	59	.28	---
Haul from combine, tr., contr.	1½ ton	1.0	.48	.24	7	.03	---
Bind	8-foot	1.0	1.38	.70	19	.26	.13
Shock by hand	---	1.0	1.08	---	19	.21	---
Haul bundles	---	1.0	3.61	.63	2	.07	.01
Haul bundles, horses	---	1.0	3.61	3.30	17	.61	---
Thresh	28-inch	1.0	.74	.35	12	.09	.07
Thresh, contract	28-inch	1.0	.74	.35	7	.05	.02
Haul grain, truck	1½ ton	1.0	.48	.24	19	.09	---
Total harvest						2.58	.98
Total 1/						5.42	3.28

1/ In addition horsework averaged 1.11 hours an acre and truck use 0.21 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VI-G3, 1950

The data presented here are based on a survey of approximately 34 farms in 1951 producing winter wheat in the gray lands of southern Illinois. These farms are in type-of-farming area VI-G3, a dairy, livestock, and poultry area.

The farms surveyed averaged 254 total acres. In 1950, 203 acres were in crops, including 28 acres in winter wheat. The average yield of wheat was approximately 11 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	1.4	2.55	3.57	100	3.57
Manure	Ton	7	2/2.00	14.00	2	.28
Mixed fertilizer(3-12-12)	Cwt.	1.45	2.25	3.26	96	3.13
Phosphate fertilizer(20%)	Cwt.	4.05	1.70	6.88	10	.69
Phosphate fertilizer	Cwt.	9.50	1.10	10.45	20	2.09
Potash fertilizer	Cwt.	1.75	3.00	5.25	6	.32
Lime	Ton	3.5	3.25	11.38	26	2.96
Twine	Lb.	1.8	.24	.43	9	.04
Total materials						13.08

CONTRACT WORK HIRED

Threshing	Bu.	11	.08	.88	9	.08
Combining	Acre	1.0	2.50	2.50	2	.05
Haul grain	Bu.	11	.09	.99	18	.18
Total contract work:						.31

1/ Approximately 34 percent of the farmers in this area purchase seed wheat.
2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VI-G3, southern Illinois, 1950

Operation	Size of equipment	Times over	Time per acre once over		Acreage covered	Average time per acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	3.50	1.75	2	0.07	0.04
Fertilize, spreader	8-foot	1.0	.68	.44	22	.15	.10
Plow, moldboard	3-14 inch	1.0	.81	.78	22	.18	.17
Plow, moldboard	2-14 inch	1.0	1.20	1.15	38	.46	.44
Plow, moldboard	2-12 inch	1.0	1.41	1.36	17	.24	.23
Disk, tandem	7-foot	2.4	.44	.42	76	.80	.77
Disk and harrow	7-foot	2.6	.47	.45	27	.33	.32
Harrow, spiketooth	15-foot	2.1	.23	.22	75	.36	.35
Drill	7-foot	1.0	.58	.49	94	.55	.47
Drill, horses	6-foot	1.0	1.10	2.10	5	.06	---
Total preharvest						3.20	2.89
Combine	6-foot	1.0	1.02	.84	89	.91	.75
Combine, contract	6-foot	1.0	1.02	.84	2	.02	.01
Haul from combine	---	1.0	.50	.25	25	.12	.06
Haul from combine, truck	1½-ton	1.0	.50	.25	48	.24	---
Haul truck, contract	1½-ton	1.0	.50	.25	18	.09	---
Bind	8-foot	1.0	1.38	.71	9	.12	.06
Shock by hand	---	1.0	1.10	---	9	.10	---
Haul bundles, horses	---	1.0	3.50	3.30	9	.32	---
Thresh, contract	28-inch	1.0	.74	.35	9	.07	.03
Haul grain	---	1.0	.50	.25	9	.04	.02
Total harvest						2.03	.93
Total 1/						5.23	3.82

1/ In addition horse work averaged 0.41 hour an acre and truck use 0.16 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VI-H3, 1949

The data presented here are based on a survey of approximately 53 farms in 1950 growing wheat, in southeastern Ohio. These farms are located in type-of-farming area VI-H3, a truck-and general-farming area in the Upper Ohio River Valley.

The farms surveyed averaged 170 total acres. In 1949, 107 acres were in crops, including 23 in wheat. The average yield of wheat was 26 bushels an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 27; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed 1/	Bu.	2.0	2.40	4.80	100	4.80
Manure	Ton	7	2/ 2.00	14.00	25	3.50
Mixed fertilizer	Cwt.	2.90	2.25	6.52	100	6.52
Limestone	Ton	1.6	3.80	6.08	30	3/ .91
Twine	Lb.	2.6	.25	6.50	7	.46
Sacks	No.	12	.07	.84	10	.08
Total materials						16.27

CONTRACT WORK HIRED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Acreage covered	Average cost per acre
Combining	Acre	1.0	5.00	5.00	25	1.25
Hauling	Bu.	26	.05	1.30	3	.04
Binding	Acre	1.0	1.50	1.50	1	.02
Threshing	Bu.	26	.10	2.60	6	.16
Total contract work						1.47

1/ Approximately 40 percent of the farmers in this area purchase seed wheat.
2/ Estimated.
3/ One-half of the cost of lime allocated to hay crop.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VI-H3, southeastern Ohio, 1949

Operation	Size of equipment	Times over	Time per acre once over: Man	Time per acre once over: Power	Acreage covered	Average time per acre - all farms: Man	Average time per acre - all farms: Tractor	Average time per acre - all farms: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreader	75-bu.	1.0	2.56	1.17	25	0.64	0.29	---
Spread lime	---	1.0	.78	.71	7	.05	.05	---
Spread lime, horses	---	1.0	4.60	2.94	1	.05	---	.03
Plow, moldboard	3-14 inch	1.0	1.27	1.21	8	.10	.10	---
Plow, moldboard	2-14 inch	1.0	1.55	1.48	27	.42	.40	---
Plow, moldboard, horses	1-14 inch	1.0	9.16	18.32	2	.18	---	.37
Disk, tandem	7-foot	2.0	.45	.43	93	.84	.80	---
Disk, tandem, horses	6-foot	2.0	1.46	2.93	4	.12	---	.23
Harrow, spiketooth	10-foot	1.2	.44	.40	25	.13	.12	---
Harrow, spiketooth, h.	10-foot	1.4	.99	1.89	3	.04	---	.08
Seed, drill	12-foot	1.0	.76	.58	92	.70	.53	---
Seed, drill, horses	9-foot	1.0	1.32	2.30	8	.11	---	.18
Total preharvest						3.38	2.29	.89
Combine	5-foot	1.0	1.13	.92	68	.77	.63	---
Combine, contract	6-foot	1.0	1.03	.84	23	.24	.19	---
Combine, s.p., contract	---	1.0	.45	.36	2	.01	---	---
Haul grain, truck	1½-ton	1.0	.90	.42	85	.76	---	---
Haul grain, horses	---	1.0	1.37	2.00	5	.07	---	.10
Haul grain, contract, t.	1½-ton	1.0	.70	.27	3	.02	---	---
Bind	8-foot	1.0	.95	.46	5	.05	.02	---
Bind, horses	5-foot	1.0	1.72	3.15	1	.02	---	.03
Bind, contract	8-foot	1.0	1.20	1.05	1	.01	.01	---
Shock by hand	---	1.0	1.59	---	7	.11	---	---
Haul bundles	---	1.0	3.33	1.00	7	.23	.07	---
Thresh	28-inch	1.0	1.00	.85	1	.01	.01	---
Thresh, contract	32-inch	1.0	.94	.36	6	.06	.02	---
Total harvest						2.37	.95	.13
Total 1/						5.75	3.23	1.02

1/ In addition truck use averaged 0.37 hour an acre and self-propelled combine work averaged 0.01 hour an acre.

State Groupings by Type-of-Farming Regions for Release of Crop Production Practice Data

Section 1

Northeast

Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
New York
New Jersey
Pennsylvania
Delaware
Maryland

Section 2

Lake States

Michigan
Wisconsin
Minnesota

Corn Belt

Ohio
Indiana
Illinois
Iowa
Missouri

Section 3

Appalachian

Virginia
West Virginia
North Carolina
Kentucky
Tennessee

Southeast

South Carolina
Georgia
Florida
Alabama

Mississippi Delta

Mississippi
Arkansas
Louisiana

Section 4

Southern Plains

Oklahoma
Texas

Northern Plains

North Dakota
South Dakota
Nebraska
Kansas

Section 5

Mountain

Montana
Idaho
Wyoming
Colorado
New Mexico
Arizona
Utah
Nevada

Pacific

Washington
Oregon
California

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 1

Northeast

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Crop year
Alfalfa:	IV-F4	1949	Corn, sweet:	I-C1	
	IV-F6			(N.J.)	1949
	(Pa.)	1949			
			Cucumbers:	I-C1	
Asparagus:				(Md.)	1949
Fresh market	I-C1				
	(N.J.)	1949			
Processing	I-C1		Oats:	IV-F3	1949
	(N.J.)	1949		IV-F4	1949
				IV-F6	
Barley:	I-C1	1949		(Pa.)	1949
	IV-F3	1949			
	IV-F6		Peas:		
	(Pa.)	1949	Processing	I-C1	1949
Beans, lima:			Potatoes:	IV-F6	
Fresh market	I-C1			(Pa.)	1949
	(N.J.)	1949			
Processing	I-C1		Soybeans:	I-C1	1949
	(N.J.)	1949		IV-F3	1949
Cantaloupe:	I-C1		Sweetpotatoes:	I-C1	1949
	(Md.)	1949			
			Tobacco:		
Clover hay:	IV-F4	1949	Type 32	VIII-D1	1949
	IV-F6		Type 41	IV-F3	
	(Pa.)	1949		(Pa.)	1949
Corn, grain:	I-C1	1949	Tomatoes:		
	IV-F3	1949	Fresh market	I-C1	
	IV-F4	1949		(N.J.)	1949
	IV-F6		Processing	I-C1	
	(Pa.)	1949		(Md.)	1949
Corn, silage:	I-C1				
	(N.J.)	1949	Wheat, winter:	I-C1	1949
	IV-F4	1949		IV-F3	1949
	IV-F6			IV-F4	1949
	(Pa.)	1949		IV-F6	1949

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 3

Appalachian, Southeast, and Mississippi Delta

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Crop year
Alfalfa:	VI-J1	1949	Tobacco:		
			Type 11	VI-H4	1949
Barley:	IV-F3	1949		VIII-A1	1949
	VI-J2	1950	Type 12 (and 11 and 13)	VII-B1	1947
				VIII-A1	1947
Beans, snap:	VII-A6	1950	Type 13	VI-M1	1949
			Type 14	VI-M1	1949
Corn, grain:	IV-F3	1949		VII-C1	1949
	VI-J1	1949		IX-D2	1949
	VI-J2	1950	Type 21	VI-H4	1949
	VI-L1		Type 22	VIII-C1	
	(N.C.)	1949		(Tenn.)	1949
	VI-L1		Type 31	VI-J1	1949
	(Va.)	1949		VI-J2	1949
	VII-A6	1950		VIII-C1	
	VII-A8	1949		(Tenn.)	1949
	IX-D2	1949	Type 35	VIII-C1	
	IX-D3	1949		(Tenn.)	1949
Lespedeza hay:	VI-J1	1949	Tomatoes:	VII-A6	1950
Oats:	IV-F3	1949	Wheat, winter:	IV-F3	1949
	IX-D2	1949		VI-J2	1950
				VI-L1	
Peanuts:	VII-A8	1949		(Va.)	1949
	IX-D2	1949			
	IX-D3	1949			
Soybeans:	IV-F3	1949			
	VI-L1				
	(N.C.)	1949			
	VI-L1				
	(Va.)	1949			
	VII-A8	1949			
	IX-D3	1949			
Strawberries:	IX-D2	1949			
Sweetpotatoes:	IX-D2	1949			

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 4

Great Plains

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Crop year
Alfalfa:	VI-E1	1949	Flax: (Cont'd)	V-G1	1949
Irrigated:	IX-F2	1951		V-F4	1949
				VI-E2	1949
Barley:	II-B4	1949			
	III-A3	1947	Grain sorghum:	II-B4	1949
	III-C2	1950		V-A1	1949
	III-E2	1950		V-G1	1949
	III-E3	1949		VI-E1	1949
	V-A1	1949		VI-E2	1949
	V-F4	1949		VII-A2	1949
	V-G1	1949		VII-G2	1949
	VI-E1	1949			
	VI-E2	1949	Hairy vetch seed:	VI-E1	1949
	VII-A2	1949		VII-A2	1949
Irrigated:	IX-F2	1951			
			Huban clover seed:	VI-E1	1949
Beans, dry: Irrigated:	IX-F2	1951			
			Madrid clover seed:	VII-A2	1949
Broom corn:	VII-G2	1949			
			Oats:	II-B4	1949
Corn, grain:	II-B4	1949		III-A3	1950
	III-A3	1950		III-C2	1950
	III-C2	1950		III-E2	1950
	III-E3	1949		III-E3	1949
	V-A1	1949		V-A1	1949
	V-A1 (Nebr.)	1948		V-F4	1949
				V-G1	1949
	V-F2	1950		VI-E1	1949
	V-F4	1949		VI-E2	1949
	V-G1	1949		VII-A2	1949
	VI-E1	1949		VII-G2	1949
	VI-E2	1949	Irrigated:	IX-F2	1951
	VII-A2	1949			
	VII-G2	1949	Peanuts:	VI-E1	1949
Irrigated:	IX-F2	1951		VII-A2	1949
				VII-G2	1949
Corn, silage:	III-E3	1949			
	V-F4	1949	Rye:	III-A3	1950
				III-C2	1950
Flax:	II-B1	1950		III-E2	1950
	II-B4	1949		III-E3	1949
	III-A2	1950			
	III-A3	1947	Soybeans:	V-A1	1949
	III-C2	1950		V-F4	1949
	III-E3	1949		V-G1	1949
	V-A1	1949		VI-E2	1949

Continued -

Crops and Type-of-Farming Areas for which Cropping Practice Data are Available in Section 4 - Continued

Great Plains

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Crop year
Sugar beets: Irrigated:	IX-F2	1951	Wheat, winter:	II-B4	1949
				III-E4	1950
Sweet clover seed:	VII-A2	1949		V-A1 (Nebr.)	1949
Wheat, spring:			continuous cropping	V-F2	1950
continuous cropping	II-B1	1950	summer fallow	V-F2	1950
summer fallow	II-B1	1950		V-G1	1949
wheat after corn	II-B1	1950		VI-E1	1949
continuous cropping	III-A2	1950		VI-E2	1949
summer fallow	III-A2	1950		VII-A2	1949
wheat after corn	III-A2	1950		VII-G2	1949
	III-A3	1947			
continuous cropping	III-C2	1950			
summer fallow	III-C2	1950			
wheat after corn	III-C2	1950			
	III-E3	1949			
	V-F1	1950			
	V-F4	1949			

Crops and Type-of-Farming Areas for which Cropping-Practice Data area Available in Section 5

Mountain and Pacific States

Crop		Type-of-farming area	Crop year
Alfalfa:	Irrigated	II-A1	1950
	do.	II-A3	1950
	do.	II-B2	1950
	do.	VI-D1	1950
	do.	VI-D3	1950
	do.	VI-D4	1950
	do.	IX-F1	1950
	do.	IX-F2	1951
Alsike:	Irrigated	II-A1	1950
Austrian winter peas:	Non-irrigated	IV-E1	1950
Barley:	Irrigated	I-A1	1949
	Non-irrigated	I-A3	1950
	Irrigated	II-A3	1950
	do.	II-B2	1950
	Non-irrigated	II-B2	1950
	do.	III-C2	1950
	do.	IV-E1	1950
	Irrigated	VI-D1	1950
	do.	VI-D3	1950
	do.	VI-D4	1950
	do.	IX-F1	1950
	do.	IX-F2	1951
Beans, dry:	Irrigated	I-A1	1949
	do.	I-A3	1949
	do.	I-A5 (Colo.)	1950
	Non-irrigated	II-B2	1950
	Irrigated	II-C3 (Colo.)	1950
	do.	II-C3 (N.Mex.)	1950
	Non-irrigated	II-C3 (Colo.)	1950
	do.	II-C3 (N.Mex.)	1950
	Irrigated	II-D1 (N.Mex.)	1950
	Non-irrigated	II-D1 (Ariz.)	1950

Crop		Type-of farming area	Crop year
Beans, dry: Contd.	Irrigated	III-B1	1949
	do.	VI-D4	1950
	do.	IX-E1	1949
	do.	IX-F1	1949
	do.	IX-F1	1951
	do.	IX-F2	1951
Broom corn:	Non-irrigated	II-B2	1950
Corn, grain:	Irrigated	I-A1	1949
	do.	II-B2	1950
	Non-irrigated	II-B2	1950
	do.	III-C2	1950
	Irrigated	VI-D4	1950
	do.	IX-F1	1951
	do.	IX-F2	1951
Corn, silage:	Irrigated	II-A3	1949
	do.	VI-D1	1949
Cotton:	Irrigated	VII-K1	1949
Flax:		III-C2	1950
Grain sorghum:	Non-irrigated	II-B2	1950
	Irrigated	VI-D4	1950
Hops:	Irrigated	I-A1	1949
Ladino:	Irrigated	II-A1	1950
Oats:	Irrigated	I-A1	1949
	do.	II-A3	1950
	Non-irrigated	III-C2	1950
	do.	IV-E1	1950
	Irrigated	VI-D1	1950
	do.	VI-D3	1950
	do.	VI-D4	1950
	do.	IX-F1	1950
	do.	IX-F2	1951
Onions:	Irrigated	VI-B1	1950
	do.	VI-D4	1950

Continued -

Crops and Type-of-Farming Areas for which Cropping-Practice Data are Available in Section 5 - Continued

Mountain and Pacific States

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Cro yea
Potatoes: Irrigated	I-A1	1949	Wheat, spring: summer fallow	III-C2	1950
do.	II-A1	1950	continuous cropping	III-C2	1950
do.	VI-D1	1950	wheat after corn	III-C2	1950
do.	VI-D3	1950			
do.	VI-D4	1950	Wheat, winter: Irrigated	I-A1	1949
			Non-irrigated	I-A3	1950
Rice: Irrigated	I-A3	1949	Irrigated	II-A1	
				(Utah)	1951
Rye:	III-C2	1950	summer fallow	II-A1	
				(Utah)	1951
Small grains: Irrigated	II-A1	1950	Irrigated	II-A3	1950
do.	III-C3		do.	II-B2	1950
	(Colo.)	1950	Non-irrigated	II-B2	1950
Non-irrigated	III-C3		summer fallow	II-B2	1950
	(Colo.)	1950	Irrigated	II-C3	
				(Colo.)	1951
Sugar beets: Irrigated	I-A1	1949			
do.	II-B2	1950	Wheat, winter: summer fallow	II-C3	
do.	VI-D1	1951		(Colo.)	1951
do.	VI-D4	1950	do.	II-D1	
do.	IX-F1	1949		(Utah)	1951
do.	IX-F2	1951	do.	III-C3	
				(Colo.)	1950
Vetch seed: Non-irrigated	IV-E1	1950	Non-irrigated	IV-E1	1950
			Irrigated	VI-D1	1950
			Non-irrigated	VI-D1	1950
			Irrigated	VI-D3	1950
			do.	VI-D4	1950
			summer fallow	IX-E2	1949
			Irrigated	IX-F1	1950
			summer fallow	IX-F1	1951